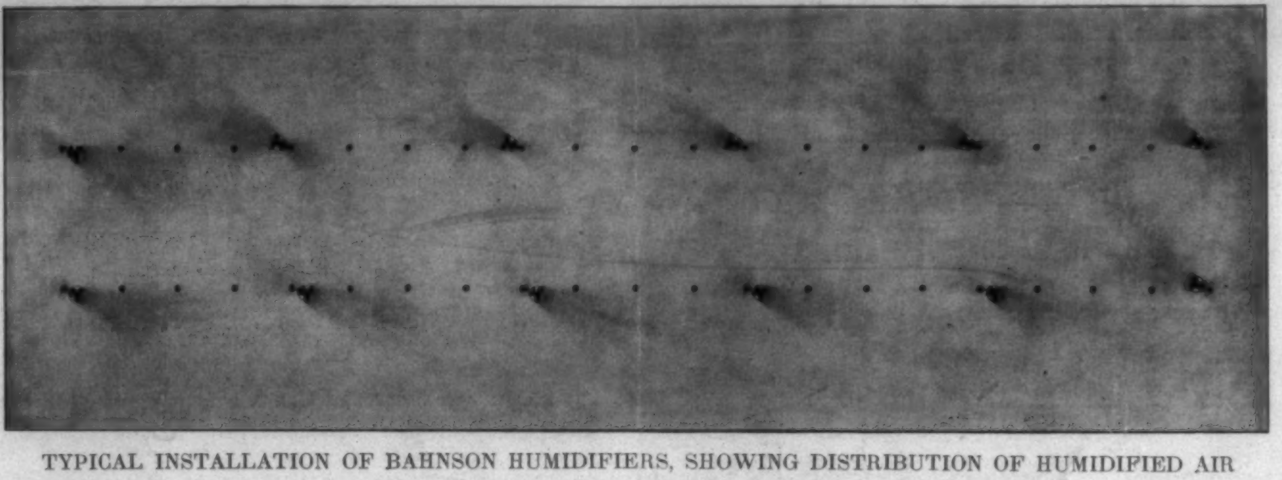
Commerce

SOUTHERN TEXTILE BULLETIN

VOL. 29 CHARLOTTE, N. C., THURSDAY, OCTOBER 29, 1925 NUMBER 9



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Humidifiers are mounted on columns whenever practicable, thus avoiding all unsightly overhead drain piping in bays. Note perfect horizontal circulation of air. Humidity escapes from any room chiefly through the walls and windows, and experience has shown that with proper horizontal circulation the center of the room always has sufficient humidity when the outer bays are properly supplied.

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The BAHNSON Humidifier in its present form is the direct development of the first successful centrifugal humidifier built in America; it is the only individual unit humidifier now on the market equipped with individual humidity control; each BAHNSON Humidifier is a distinct, self-contained humidifying equipment not dependent for its action on any other unit, and yet so designed and arranged in large installations that all units co-operate perfectly to obtain the desired results.

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The last patent on BAHNSON Humidifiers was issued to the same man who built with his own hands nearly twenty years ago the first satisfactory centrifugal humidifier produced in this country.

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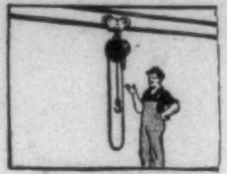
The Bahnson Company

Humidification Engineers

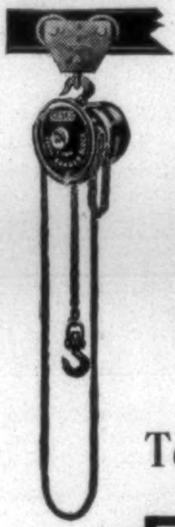
Winston-Salem, N. C. **New York Office: 93 Worth Street**

Five Men and a Hand-Truck

equal



One Man and a Yale Spur-Geared Chain Block on a I beam trolley.



AND the one man with the Yale equipment will perform the same work in the Safest Way, take up less working space, and do it quicker.

The Yale Spur-Geared Block is the *safest*, speediest, portable hand hoist.

"From Hook-to-Hook-a-Line-of-Steel"

The new Yale catalog shows you many ways to save money and increase production in your plant by using Yale Chain Blocks and Electric Hoists.

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CHARLOTTE, N. C.

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HOUGHTON

WATER ON THE BRAIN

Not a Prohibition subject,

by Chas. E. Carpenter,

AT last the textile trade has found a Moses.

He proposes that each mill protect itself against having anyone make a profit on that mill, by the very simple and very old process of having the mill manufacture everything it uses.

Wonderful!

I say, go to it! And good luck!

Your great granddaddies did that, why not you?

I remember when almost every mill made its own leather belting and it is as practical to do it today, as it was then; but to carry out the idea of this textile Moses, each mill should also breed, raise and slaughter its own steers from which the hides are obtained, and tan its own leather.

It can be done, you know; all it takes is time, space and capital.

He claims that everything containing water is adulterated and fraudulent.

When we stop to consider that Moses himself is composed of about 88 per cent water, we will leave the question of fraudulency to the readers; as to the adultration; well you know it is quite common to find water adulterated.

Moses has made the wonderful discovery that certain textile products contain water; he admits that these products cannot be made without containing water and claims that the mill men should put in the water themselves. In other words, he proposes that the mill men shall cheat themselves in order to save profit on softener.

WONDERFUL!

When you go to your favorite butcher and buy a nice lean rib roast of beef, you will find that it contains 67 per cent of water, therefore the beef is fraudulent and your butcher is a cheater and you ought to put the water in the beef yourself.

A fresh hen's egg contains 73 per cent of water ,which is proof that the hen is a cheater and producing fraudulent commodites, so it is your duty to scurry around and find a hen which will lay waterless eggs. Maybe the rooster would have to be consulted, too; I don't know much about this sort of thing.

The facts are that there are many softeners made by many concerns all of which are in competition, one with the other, and this naturally will do what competition always does—better quality and reduced price—and no other law was ever known that would do this and no Moses was ever able to direct its being done excepting by the law of competition.

I don't suppose that even a self-elected Moses is really to be taken seriously if he has water on the brain. In fact, they do say that water on the brain is worse than bone in the head, but it must be something awful when one is afflicted with both.

E. F. HOUGHTON & COMPANY

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Oils and Leathers for the Textile Industry

Guarantee the washability of your novelty bedspreads!

Rapidly and surely the tides of fashion have borne novelty spreads to the fore. But, as the vogue has grown, competition has grown; and today the element of price looms up threateningly.

But the price-spectre is only a spectre, after all. Guarantee the washability of your spreads, and he will vanish forthwith.

You can accomplish this result economically and easily by using Celanese. Dyed with its own SRA colors, Celanese is *fast*. You can guarantee it as such without the slightest reservation.

Moreover, Celanese adds greatly to the appearance of novelty spreads. Its rich luster actually increases with washing. Its durable yet elastic fibers assure lasting shapeliness and long service. It imparts the quality appeal which overcomes price handicaps.

Celanese, dyed with its special SRA dyes, is fast to sun, soap, salt-water and perspiration. ¶ Waterproof, highly elastic, remarkably durable, with unique hygienic qualities. ¶ Even in a plain fabric no shiners ever appear when Celanese is used.

CELANESE

Reg. U. S. Pat. Off.

BRAND YARN

Remember that our dyeing and textile experts are at your service, ready to help you to use Celanese to your profit. Write us today.

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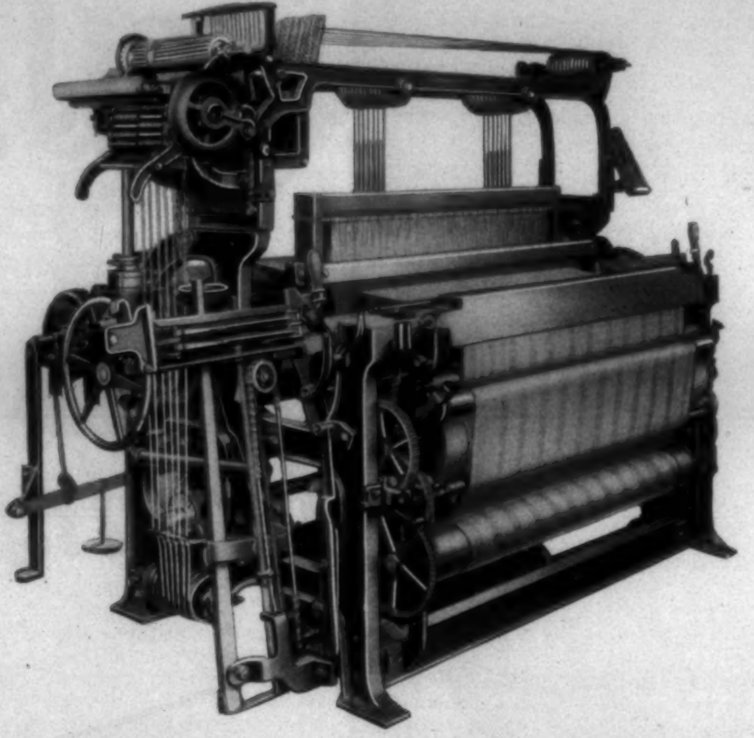

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Our Silk Loom, with Knowles Head or Dobby, equipped with eight roller bearings on crank, bottom and rocker shaft, cut tooth driving gears and shock absorbing crank connectors represents the last word in silk Loom construction.

These improvements have resulted in a gratifying amount of business from all progressive silk manufacturers.

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Less than 1% Roving Waste

The Termaco shows who are responsible for unnecessary roving waste—and makes it easy to stop this profit leak.

"The Termaco Cleaner has effected several important economies," reports an eastern mill. "In the first place it enables us to keep our roving waste at a minimum. When the spinners cut the waste from the bobbins, it is difficult to control the amount obtained, and it often runs as high as 5 per cent."

The foregoing mill, by means of a simple method made possible only by the Termaco, "has reduced the roving waste to .75 per cent."

If your mill uses roving bobbins, you too should be able to reduce roving waste to less than 1 per cent.

Write for special survey No. 10 for it contains information mill executives have found especially valuable.

A special survey has been prepared which gives in detail the simple method of reducing the amount of roving waste. It shows how a Termaco operated even at much less than capacity has reduced roving waste 9,750 pounds annually. It explains how a Termaco paid for itself not once but three times a year.

The TERRELL MACHINE CO., *Charlotte, N. C.*

The TERMACO

ROVING BOBBIN CLEANER

SOUTHERN
TEXTILE BULLETIN

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 39-41 S. CHURCH STREET, CHARLOTTE, N. C. SUBSCRIPTION $2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MARCH 2, 1911 AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MAR. 3, 1879.

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Need of New Textile Fibres

THE history, preparation and outstanding qualities of Rhea, the newest textile fibre, was recently interestingly portrayed by H. G. Beede in an address, "Why New Fabrics and Fibres," delivered before the Textile Associates Club, in Providence, R. I. Among other things, Mr. Beede said that it was his belief that there are 20 per cent too many spindles in the United States when the limited supply of with its widely expanding industrial cotton is considered in connection uses, further restricting the supply available for the spinners of the country. Periodic depressions, he said, serve to bring out this fact. Mr. Beede further said that cotton and its comparatively high prices reveal the necessity of new fibres. Wool and flax were likewise too high priced. Artificial silk was merely an alleviation, the production amounting to only a few hundred thousand bales, and has served mainly to keep down the price of natural silk. This left the fibres of the stingless nettle variety, embracing the Wild Rhea of India, Ramie, and Rhea or China Grass. The speaker then went on to give the history of Rhea from its earliest days and uses in Egypt and China, its methods of growth and the crude hand processes by which it was previously degummed and woven into fabrics.

"Rhea," Mr. Beede continued, "has perhaps received greater attention after the Great War on account of the shortage of flax and a suitable substitute was much wanted.

"The British Empire Flax Association officially pronounced in 1920 Rhea Fibre to be the best of all fibres as a substitute for flax.

Characteristics of Rhea.

"Laboratory tests have shown the great superiority of this fibre over many others now in use.

"Strength as compared to other fibres is Rhea 100; Hemp 36; Flax 25; Silk 13; Cotton 12.

"The length of Rhea filaments range from 2½ to 18 inches, against flax of 1-16 to 2½ inches.

In elasticity Rhea 60, Flax 66, Hemp 75, Cotton 100.

"Cordage spun from the fibre has sustained 252 pounds, as against 84 pounds required by the British Government Dockyards.

"For heat we have a test of four hours subjection to high pressure steam at two atmospheres resulting in a loss in Rhea 0.89, flax 3.50, Italian hemp 6.18, Russian hemp 8.44, jute 21.3.

"The following test was made by one of the largest electrical companies in this country. Rhea was tested against hard finished cambric.

"At 80 degrees centigrade (about 170 F.) In oil after 20 days, cambric 65 per cent; Rhea 97 per cent remained. In air after 20 days: Cambric 72 per cent; Rhea 122 per cent remained.

"At 100 centigrade (about 212 F.) In oil after 20 days cambric 19 per cent, Rhea 67 per cent remained. In air after 20 days: Cambric 32 per cent, Rhea, 94 per cent remained.

"It will be noted that the Rhea actually increased in strength after 20 days in air at 80 centigrade.

Foreign Developments.

"If I have been sufficiently clear up to the present, you will probably be wondering what America and Europe have been doing up to this time. On the other hand some of you know of experiences in your textile trades that will explain the absence of production. Originally perhaps with the exception of the Chinese the reason was the absence of patience, but later the want of economy of operation has been the cause; its lasting qualities, its strength and its beauty fully warranting every endeavor to make this one of the principal fibres of textile manufacture. We have only within recent time solved the difficulties of degumming Rhea in commercial quantities, previous to which they have tried to degum with strong chemicals and they have tried with pressure and heat, with the general result of spoiling the strength and lustre of the fibre. Both the German and French chemists have gone into this matter very thoroughly, and today there are two large plants in Germany that are in production. Their process appears to be by chemicals and pressure, improved from past experience and are producing a very fair fibre which can be marketed commercially. As the process is a secret one, actual facts are difficult to obtain.

"The French have other processes; the Rossi process being used by "La Societe Francais du Ronnisage Industriel Bonnetable of Sarthe,' but I have not heard of any great production from them.

"The British do not seem to have advanced as far as the Germans although the firm of Frank Warner & Sons have made cloth which upholstered some of the rooms of the well known DeKayser's Hotel in London.

The Italians do not appear to have made much progress, although the Rossi process which I have just mentioned as being used by a French firm was invented by Professor Rossi of Milan. This process incidentally is a bacteriological one. America has been by no means idle during this time. A great many attempts have been made to degum at a great cost and many failures have resulted. In the Rheabat Corporation of Boston we have a company now in production and just getting into its stride. From the tests already made, fibre is being turned out as near as possible to its laboratory test and fully comes up to its original promise. Fabrics are being turned out from its fibres on a commercial scale, and other uses are being found for its fibres. We also have another company recently started working under a German process which is getting into production.

Degumming Processes Secret.

"As nearly all degumming processes are secret ones it is very difficult to make comparisons, but I believe the principal differences between the American and German processes appears to be the absence of pressure in the American, and in consequence a quicker time in degumming; the German taking approximately eight hours against two to three hours by the American.

"The successful degumming of this fibre has opened up a large field of manufacture, and one in which almost all branches of the textile trade can participate. It is an additional fibre to the textile world. I suggest a few of the uses it can be put to.

Uses of Rhea.

"It is admirably suited for blending with silk on account of its lustre. It is largely used in France for this purpose.

"On account of its long fibre it can be used as a substitute for wool, especially as it is more like wool than any other plant fibre.

"It can be substituted for fine linens, damask table cloths and napkins, gentlemen's shirts, collars and cuffs, and fine linen generally.

"It resists damp very well and imparts non-shrinking properties to wool when blended with it.

"It is stated to possess valuable hygenic properties to a degree which is unknown in other textile fibres.

"On account of its absorbent qualities it dyes fast and washes well, taking the same dyes as cotton.

Other Qualities.

"Its heat-resisting qualities makes it a factor in engine packings, dynamos and electrical motors.

"Its wearing qualities for slasher cloths.

"Its absorbent and non-shrinking qualities for underwear and knitted wear generally also medical wrappings.

"Its strength for hose pipes to which may be added its rot resisting quality.

"Rubber and waterproofing goods will be well served on account of its resistance to heat. The vulcanization at times rots the cotton now used.

"Plushes and excellent dress goods can be made from this fibre.

"The noils which contain much long fibre can be worked up again and spun into cheaper yarns which can be used for many purposes such as carpet yarns, cloths, woolen mixtures and shoddy mixtures.

Manufacturing Processes.

"The form in which fibre is received at the degumming of the Rheabat Corporation, and how it is handled can be briefly described as follows:

1st. "Rhea, as received at the plant, comes in bales of from 550 to 650 pounds each. When the bale is opened it is found to contain bundles of Rhea grass; each bundle consisting of a number of ribbons tied together with a short piece of grass. The ribbons are flat and each one is composed of a multiplicity of fibres which are very tightly bound together by a variety of gums. The ribbons vary in length from 3 to 6 feet.

2nd. "The bundles are first separated from the bale; the bundle tie then cut. A number of bundles are put together and by the use of a special machine the undegummed Rhea grass is cut to the required

(Continued on Page 13)

The Retailers Point of View

SPEAKING before the National Cotton Manufacturers Association during the discussion of merchandising, Louis E. Kirstein's remarks were as follows:

In telling you something about the retailer's point of view I feel some embarrassment in coming to a gathering of men who are in the habit of conducting large affairs and trying to tell you how to improve your business because, the Lord knows, I have trouble enough in trying to improve our own business, and I understand fully that some of the suggestions which I should make to you for your consideration perhaps have technical difficulties with which I am not at all familiar. I do not claim to be and am not an expert on the manufacture of cotton goods.

Retailers want all the help they can get. They do not expect to get that help for nothing and I hope they are intelligent enough to know that if they do not give something in return they cannot hope to get much. We try to tell our people that any time they get better than a 50-50 proposition, it is too expensive. So, notwithstanding the bitterness and the criticism that you manufacturers have for the retailers and have so often expressed, I want to assure you that it is the disposition of the retailers, insofar as my experience goes, that they want to do everything they can to help the New England manufacturers:

We do believe that there are some things that the cotton manufacturers might do that they are not doing now to help the situation. One of the greatest problems, if not the greatest problem, that we have in our business is try to find out what the people want. We are confronted all the time with the situation made by our buyers who buy what they think the public ought to have instead of what the public want, and it is a very difficult thing to sell the public something they do not want.

Why Retailers Buy Abroad.

We have heard a great deal of criticism about the fact that we do not buy home products, that we prefer to buy abroad and buy everywhere else. I should like to point out to you gentlement that we at least have intelligence enough to know that if we could buy all of our merchandise on the street on which our stores are located we would be ever so much better off; we could get the merchandise cheaper, we could put it into our store quicker and it would help to give us better delivery. But the fact of the matter is that the people will not buy what we think they ought to have; they will only buy what they want. So far as my experience goes, we believe that the whole question of merchandising is summed up in these words, that is, provide the public with what they want, when they want it and at an attractive price. We would be very glad indeed to buy all the merchandise that we sell, as I say, here in New England.

If you ever made any study of the situation, you will know that patriotic appeal does not apply to the public. You may try all you like, talk about New England manufacturers for New Englanders, but unless the New England merchandise manufacturer has a product much better or somewhat better, either in quality or in price,— and I think more particularly in quality—than that made elsewhere, they will buy the merchandise made elsewhere. It is very difficult, indeed, and it has been tried many times, to boycott retail stores for one reason or another, on account of labor difficulties and many other reasons. It is very difficult thing. The human element is so strong that people will buy where they can buy to the best advantage. And it seems to me it is up to the manufacturers to meet that situation if they want the public to buy their goods.

Objects to Merchandising.

Another thing. We do not like your method of merchandising or, if I may say so, your lack of merchandising. We do not like your methods of salesmanship. I have had more or less experience with merchandising in a retail way. I go abroad at least once a year and visit the markets to get the market information and find what the styles are in the interests of the retail business. I happen to be chairman of a committee that maintains officies abroad representing eighteen of the largest stores in the United States. I have never had anyhody, with the exception of the chairman here, and one other gentleman, come to me and ask we what I had seen abroad. What are the new ideas? or what do you think we ought to make? or what do you think we ought to do? Perhaps you do not care. If you do not, and if you are satisfied with what you are making, well and good. But the impression prevails at least that New England is not holding its own in the manufacture of textiles. I have no disposition to discuss whether that is true or not, but if the impression prevails, I want to assure you it is just as bad as if it was true, and if that impresion does prevail—you know whether it does or not—it is up to you to dispel that impression.

Function of Sales Manager.

I should think, if I may suggest it for your consideration, that you people should investigate your selling departments, your salesmanship. I do not mean for you to go out and hire a sales manager who is an order taker or who goes out and just tries to take orders, but I have in mind a sales manager who will influence your product and who will build around himself and organization, who will know what the style is, how long the style will last and whether there is any money in it or not. We can find that out without very much difficulty, provided, of course, he has the proper organization. It cannot be done in a minute, but it certainly can be done. One of these things that the sales manager can do is to find out how long a style will last. I do not know how much money is lost on the best styles. We lose a great deal of money because we play them too long and the competition becomes so severe and the prices so reduced that an article which was once good becomes an article on which you must take a loss. We find that all the time.

A Successful Buyer.

Our most successful buyers are those who can tell when a style has reached its zenith and when it has begun to decline. If I may give you an example, there was a time a couple of years ago when a certain kind of scarf which was made abroad had a tremendous run. We had a man abroad who cabled over and said, "If you want to get any of those scarves for next year you must place the order now." Our buyer, who was very astute, did not reply to it, notwithstanding the fact that we were selling more that we had ever sold. But this buyer saw the thing was on the wane and we stopped buying and we did not get stuck. I do not say that we alone do this. Other buyers in other stores do the same thing.

But my idea of a sales manager is a man who can develop an organization, as I say, that will influence your product and will help us to know what the styles are and what you are going to make in advance, so that we may get an opportunity to develop it. I do not know whether you ever realized it but a style alone, when it comes out, unless there is a proper distribution and proper production, is no good. If somebody was going to bring out a new style, and of some goods that were not available for production, that style would not be any good for a year because they would not be able to produce it before then. A proper sales organization knows that.

You can see what happens in the sales organiations in the motor car industry. The salesmanship in the motor car industry is one of the most extraordinary things we have ever seen, and we try to copy it a good deal. The salesmanship that some of these large motor car organizations use might also be worth your observation.

Then there is the question of standardization, trying to make the same thing. The result is that you have to sell the merchandise at the lowest possible price and there is nothing in it. The retailer soon gets tired of it and he cuts the price as soon as he can because his position is an unfortunate one, and just as soon as he posibly can he drops it. I am in entire accord with Mr. Hoover who is trying to standardize and I think that he is doing a splendid work when he reduces the styles of paving brick from 66 to 5 and of milk bottles from 49 to 9 But you cannot standardize beauty. You cannot standardize lovely things and the more styles and the more varieties that you make, the more business you are going to get, provided the things are beautiful, provided there is quality to them.

I know that people say that the department stores do not want things beautiful, they want them cheap. Why? Because they are encouraged by the producers and because competition is keen. It is perfectly possible for your sales people to go to key people—there are a number here in Boston—to the people that are followed—and if you can help those people to market your merchandise, they are ready and willing to meet you half way. There is no question of a doubt about it in my mind. And so I say to you instead of having a grouch on the retailers, you will find them entirely ready, willing and anxious to work with you in every possible way, and if there is any felling at all on your part that New England retailers are not more than anxious to sell New England merchandise, then you must have a mighty low order of respect for our ability, because as I said before, we are intelligent enough to know that we have got to get our money from New England people and unless New England thrives we cannot do so, and the only reason we sell other than New England goods is because the public demands them.

Southern Spinners' Bulletin

The weekly bulletin of the Southern Yarn Spinners' Association says:

"Conditions in the yarn market are quiet; trading is less volume than last week. Both spinners and buyers are apparently awaiting the outcome of the Government report of October 26 before making further commitments.

"Prices remain about the same level as last week. Spinners' prices are firm, and at an advance over reported quotations. It is apparent that spinners have sold their entire production for at least 60 days, and that they are not inclined to contract for deliveries beyond the first of the year at present ,evidently preferring to await the next Government report before committing themselves to further contracts.

"The recent rains in the South have not ameliorated the drouth conditions. No sufficient rainfall has occurred to more than muddy the waters. Curtailment is still in force by the Southern Power Company, and mills operating independently are operating at reduced schedules.

"The frequency of the Government reports is a material deterrent to business, causing unsettled conditions, and failing to properly forecast the future. It is to be hoped that legislative actions will remedy this condition shortly, as the figures of the report has proven an unsettling factor in business transactions."

Bleaching Textile Materials With Hydrogen Peroxide

HYDROGEN peroxide has been used for a considerable period in France for the bleaching of silk and woolen materials as a ground preparation for the dyeing of pale and of bright shades. In this country, until quite recently, the preparation given to such materials was that of bleaching with sodium bisulphite and sulphuric acid. This latter method is only a temporary bleach, the natural coloring matter of the wool, and also that produced by the action of alkali during scouring, is reduced to an almost colorless condition, but on exposure to air and light again returns approximately to the original color. It is probably on this account that the French dyers obtained, until the commencement of the war, a better name than the English firms for the dyeing of pale shades.

The bleaching of wool for the production of whites in this country has also been done by means of sulphur dioxide, in either gaseous condition (stoving) or by a solution of sulphur dioxide. This method is being gradually replaced by the much more permanent bleaching by means of hydrogen peroxide, and this is often followed by stoving for producing a purer white. Hydrogen peroxide has for a long period been used for the bleaching of feathers, wood, straw, bone, ivory. hair, furs and silk. For this purpose the hydrogen peroxide of ten to fifteen volumes has been quite satisfactory, but, on account of the low percentage of hydrogen peroxide in these products, it was not possible to keep a standing bath of peroxide and keep it up to bleaching strength by subsequent additions of the peroxide. Hydrogen peroxide is now available of 100 to 120 volumes, and this concentration allows one to keep a standing bath. The water supply for a standing peroxide bleaching bath should be of the purest obtainable; iron compounds, such as rust, or iron naturally present in water, are injurious, as they act as catalytic agents, causing the peroxide to be decomposed into oxygen and water, this reaction taking place readily, so that nascent oxygen is not available and consequently does not act as a bleaching agent. Iron, copper and brass, in the form of piping, taps, nails, etc., should also be absent in plants used for peroxide bleaching. The metal portions of the plant, which must not, however, be in the bleaching tank, should be protected by painting with a solution of celluloid or cellulose acetate. The latter is probably the better agent, especially when applied as a solution in amylacetate.

The vessels for bleaching are generally made of wood, and these, especially if new, should be well boiled out several times with a solution of soda ash before use.

The coils for heating are often made of lead, but tin is far better and, in spite of the increased cost of installation, is finally more economical. The goods which are being bleached must not come into direct contact with the steam coil. This should be covered with a wooden false bottom. The steam pipe should be fitted into the vessel below the false bottom, or, if this cannot be done, then that portion which passes through the bath should be covered with wood to prevent its direct contact with the goods.

The temperature at which bleaching is effected depends upon the material to be bleached. Horn and bones are bleached at a temperature of 30-35 deg. Cen., wood at 40-45 deg. Cen., tussah silk 40-50 deg. Cen., cotton 60-65 deg. Cen. ,and straw at 80 deg. Cen.

The higher the temperature, the more effective and intensive is the bleaching action, but this is also unfortunately accompanied by a larger loss of oxygen. This loss of oxygen, due to the direct decomposition of the peroxide into water and oxygen, may be partially prevented by the use of certain agents. The most suitable agents for this purpose are borax, sodium silicate or water glass, sodium pyrophosphate and magnesium sulphate. These agents should be selected according to the material that has to be bleached.

In the peroxide bleaching of textile materials it is very essential, much more than in any other method of bleaching, to have the material thoroughly cleansed. Residues of fat, soap, or particles of rust, will cause a rapid decomposition of the peroxide bath. It is in the consideration of this fact that the life, and consequently the cost, of a standing bath depends. With thoroughly cleansed materials it is possible to keep a standing bath for several weeks, replenishing the bath with peroxide and ammonia to the necessary bleaching requirements.

For the bleaching of loose wool, sliver, yarn or piece woolen or worsted goods, the following bath is found to give satisfactory results:

For each 10 gals. of water, which has been previously heated to 45 deg. Cen., add from 1½ lb. to 3 lb. of hydrogen peroxide (100 vols.), 4 oz. of sodium pyrophosphate, and ammonia until the bath just smells of ammonia—this will be about one-tenth of a pint; large excess of ammonia is not advisable, although the bath must be just alkaline. The goods which have to be bleached are now immersed in this bath and left until the desired degree of bleaching is attained . This period will vary from two to six hours. The material is taken out, hydro-extracted and dried. With piece goods it is preferable to use two tanks, giving about two hours' treatment in the first, squeezing off, and then treaitng for a similar or longer period in the second. The introducing of iron or copper from the squeezing-off rollers into the bath should be prevented.

The baths are then again warmed up, replenished with peroxide and ammonia, and used until the bath

(Continued on Page 32)

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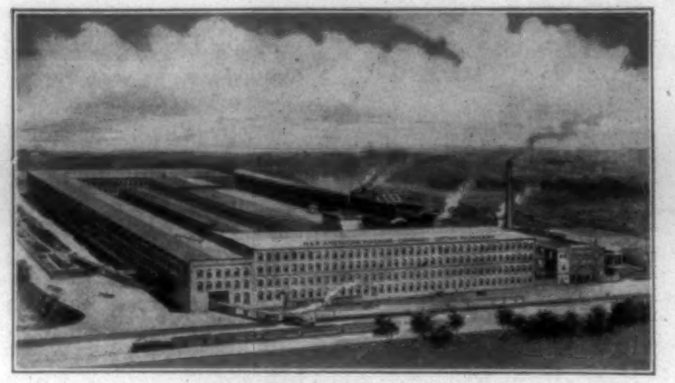

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Executive Resourcefulness Needed

By H. D. Martin.

THE resourceful mill man is a valuable asset over his less fortunate compeers. The man who is skilled in the methods of efficiency, and who possesses abundant means to accomplish various new things, or of doing old things in a better way, and is rapid at picking up new ways of progress, is said to be resourceful. Especially will he be called resourceful if he is quick to adjust himself to changes and to squaring up with the various trying situations as they come up. Qualifications of such have been the means of making many mill men very successful cotton manufacturers.

There is usually some good way out of every difficulty. At any rate there is the best way to accomplish anything, and the mill man who finds out the best way to do things, is sure to do more and better work than the man who is content to plod along in the ordinary channels, and is satisfied to follow in the ruts of the past. There is a marked difference between the resourceful man and the non-resourceful man. The resourceful man is always hopeful and believes he is going to find the best way out of his troubles very soon; moreover, he tries to find the way out, while the non-resourceful man often finds himself stranded. He is always dependent and wonders how he is going to get out of his troubles but makes no move and appears helpless.

To illustrate the difference between the resourceful mill man and the mill man who is not resourceful we will mention a few instances:

There was one mill where the intermediate roving frames were not keeping up. They were already going too fast and not running right. They were falling behind. The carder thought that he better speed them up a little more, to get more roving, but as the machines still lagged behind, he speeded them up again, but failed to get the goods required. In despair he went to his superintendent for advice as he should have done in the first place. The superintendent saw at once the mistake which had been made, and kindly ordered the machines to be slackened in speed more than they were running in the first place. The carder was very reluctant to do this, but hoped it would aid him some. To his great surprise the machines produced more roving and gained production over the succeeding process.

There was another mill where the filling spinning room began to run very bad. The superintendent did not seem to know what to do. The room had always been operated at a very high speed. The spindles were revolving at nearly 11,000 R.P.M. on No. 38s yarn. While the work was going from worse to worse, the superintendent and the overseer of spinning were trying to solve the problem. The spinner finally asked the superintendent if he would let him do one thing toward remedying the situation. This wish was granted. The overseer asked to have the speed of the spindles reduced to about 10,000 R.P.M. Soon as this was done the running of the work improved, and the trying situation was entirely overcome.

In another mill, where a superintendent had been quite successful, suddenly he found himself stranded in the warping department. He had "monkeyed" with the speeds and succeeded in getting more and more production until he had overdone the thing.

In despair, he went to consult a lagged behind, he speede dthem up fellow superintendent, and invited him to come and see his wrecked warping room. The visiting superintendent saw at once that the warpers were going too fast, and he plainly told his brother superintendent that he must reduce the speed. "But," said the troubled superintendent, "the warpers are not keeping up now; how am I going to keep up if I reduce the speed!" He could not see the point!

However, the visiting superintendent offered to prove that he could get off more work by operating at a slower speed than he was producing now at his higher speed. So it was agreed that some yarn would be sent to the consulted superintendent's mill to be tried out. This was done, and the afflicted superintendent was invited to come and see his own yarn warped on the same kind of warpers, but at a much slower speed. He was astonished to see the yarn run perfectly, and the set of spools was run out in one-half of the time that it took to run out the same kind on his own highly speeded warpers. He went back to his mill to reduce the speed of his warpers. After that, he had no further trouble with his yarns nor his warping. The work also went better in his weaving department.
are actual experiences showing the
The instances above mentioned difference between resourcefulness and non-resourcefulness.

The trouble is that some men get to going so fast that they cannot stop to think. They cannot turn the corner safely and run up against a stone wall. They stay there until they are picked up and given a fresh start or remain down and out.

Still there is another class which go so slowly that they stall their engines of progress. They spend too much time recranking themselves. What they need are self-starters and much more knowledge of how to be throttling down without stalling their progress.

There is a great deal in knowing what to take up next and how to do it rapidly.

It is said that some years ago, a technical professor took his students out for a cruise on his yacht where he wanted to test out the judgment of some of his pupils. Said he to one of them, "Suppose you could not get water into your boilers, what would you do?" The young man replied that he "would examine the feed pump." "But," continued the professor, "if you did not succeed in

(Continued on Page 34)

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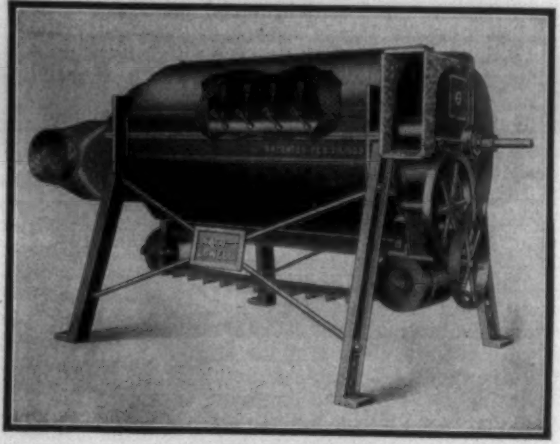

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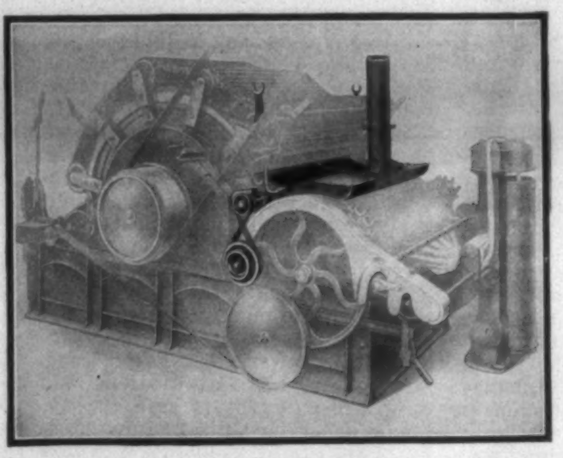

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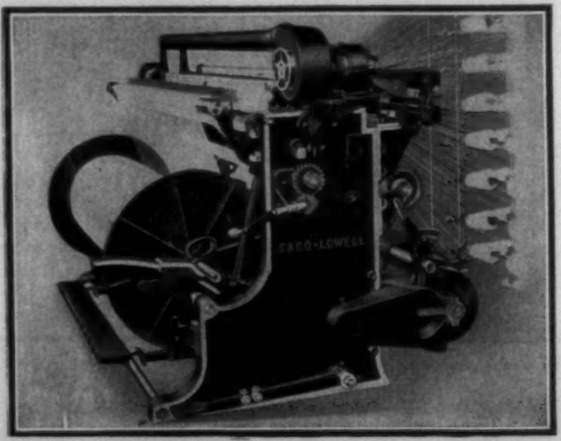

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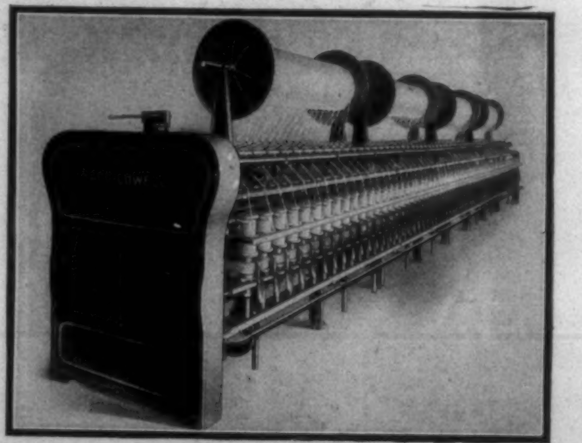

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Cooperation Between Mills and Selling Agents

Address by John E. Rousmaniere Before Natonial Association of Cotton Manufacturers.

CO-OPERATION was very simple when there were few goods and of a plain kind; cotton was stable; and it merely was a question of the treasurer and the selling agent getting together and deciding when they had better sell goods. But since the price of cotton has changed so radically and has such violent changes and since the need of staple goods has largely diminished, so that mills have to go much more into styles, cooperation between mills and selling houses is more difficult. I have no doubt that in the general course of events it will be worked out splendidly by the mills. Some mills may have worked it out before this and some selling houses have.

Some of the mills are getting a little further ahead in cooperation than some of the selling houses have. That has to be straightened out in the long run, or otherwise the mill or selling house that hasn't got straightened out will be in difficulty.

The part of the subject that I am going to discuss is more cooperation in general between the selling house and the mills than cooperation with any particular mill. The second subject requires too much time and would require a great many details of discussion which I have not time to give.

Along with the cooperation between the mills and the selling houses there has already arisen closer cooperation between the various mills and the various selling houses, and the Cotton Textile Merchants in New York, comprising very nearly all the commission houses, is the result of that cooperation.

It was formed back in 1916 to bring the selling houses closer together. It worked very effectively in 1919 and 1920 and 1918—we began in 1918—and in 1919 and 1920, when there was fear of cancellation of contracts. They originated a very effective system of reporting at that time which kept the cotton industry practically free from cancellations of large contracts, which occurred in various other industries greatly to the detriment of the men interested in the plants.

They have worked in other ways, in cooperation and arbitration. We have prevented, it is safe to say, hundreds of lawsuits in New York by a system of cooperation which we have there between the various buyers and sellers. We have worked on foreign credits and there are other minor matters that have taken up, sales notes, and things like that which we have tried to perfect and get in better condition.

This last summer we took the principal step in cooperation largely with the southern mills that we have taken during this year. The first of June the Supreme Court rendered two decisions which clarified the position of trade associations. The cement manufacturers' case and the maple flooring case, I think they were. The Supreme Court in these two decisions laid down very clearly what trade associations could do in the way of cooperation and what they could not do. Soon after that, again at the urging of several southern mill men and at the urging of several houses in New York, we got up a system of reporting on certain cloths so that beginning about the first of July there were certain classes of cloths the manufacturers of which make a report every week to the secretary of the association, who combines all these reports and sends out to each one reporting in the grand total; that is supposing there are twenty houses making wide print cloths, thy report their production during that week, their stock on hand at the close of the week, their sales during the week and in some classes the amount on the looms; these reports are consolidated by the secretary and then the consolidation is sent out to every one who reports their own status. It has been, I think, of decided advantage to the market. There have been other aids to the market in these particular cloths which complicate an exact decision as to the benefit arising from this method, but undoubtedly, as time goes on, we will see very clearly the exact result.

The aim of it is give to each mill who receives it from the commission houses an exact idea of the status of that cloth; that is, as to whether the cloth is oversold, as to whether there is a large stock on hand, in order that each mill may guide its own production intelligently. There has been in the industry in the past a certain lack of information as to what each one was doing and as to the general situation of each kind of cloth that was being made, leading oftentimes to serious overproduction and also leading at times to underproduction, thus leading to a lower price and to overproduction

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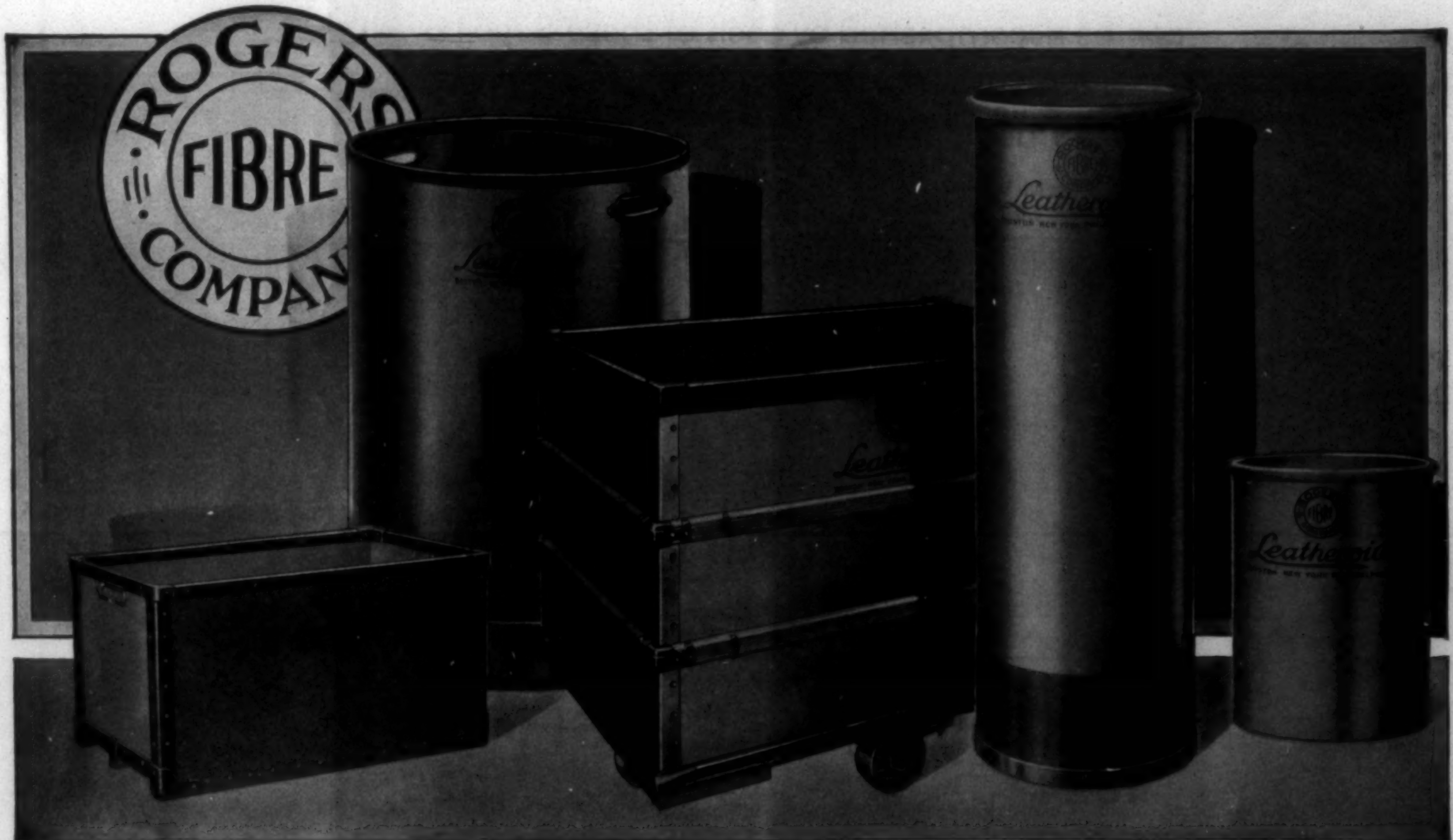

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Need of New Textile Fibres

(Continued from Page 7)

length to suit the particular purpose for which it is to be used.

3rd. The undegummed Rhea grass is then treated by an open tank process known as the 'Rheabat process,' which fully removes all the gums but does not injure the fibre.

Degummed Fibre.

"In order to intelligently determine how the prepared fibre can best be handled for various purposes, how it can be spun into yarns and what uses can be made of the various products, it is well to know something about the exact qualities which the fibre possesses and the peculiar characteristics inherent in the fibre. When degummed the individual fibres have the following characteristics and qualities.

Almost Pure Cellulose.

"This characteristic is one which determines its non - deterioration from water o roil. This determines also its capacity for absorbing dyes, and the readiness with which it can be bleached. As the fibre is practically a pure material it thereby possesses desirable qualities for electrical insulating materials, and also for surgical uses on account of its absorbent qualities and freedom from germ feeding impurities.

Strength

"In excess of all other fibres. This quality makes it particularly valuable where strength is desirable. When yarns or fabrics are wet the strength is increased an additional 90 per cent; a quality which is not true of any other fibre.

Tubular Structure.

The fibre while tubular is not a true round but is more or less flattened into irregular shapes. The tubular structure give the fibre peculiar insulating qualities as regards heat and cold, and also gives desirable qualities for surgical and sanitary uses, as the hollow fibre adds to the absorbent qualities and is non-heating.

Slightly Spiral.

"The fibre is slightly spiral but does not compare with cotton in this respect. However, when moistened the fibre takes on additional spirality and if an individual fibre is dipped in water it will be noted that it twists in the opposite direction from which any other vegetable fibre twists when moistened.

Length of Fibre.

"The fibres are extremely long and do not break up into short fibres when degummed to the fullest extent. The basic fibre is seldom shorter than 2½ inches, and usually from 15 to 18 inches in length.

"Nearly all other fast fibres like flax for instance are extremely short when fully degummed, and it is for this reason that flax cannot be fully degummed without being separated into the basic lengths; and not being fully degummed flax easily rots and mildews.

Knobs or Joints.

"The individual fibres have a series of knobs or joints like bamboo and it is this characteristic which makes the fibre suitable for mixing with wool; the knob or joint of the Rhea tying up readily with the barbs or scales on the wool. It is these knobs or joints which give certain felting qualities to the Rhea fibre.

"The fibre is much less elastic than the other commonly used vegetable fibre such as cotton, or animal fibres such as wool and silk, but is similar to other fast fibres. While this property of the Rhea fibre may be detrimental in some cases it is just what is most desirable in others. This quality is particularly desirable for mechanical uses where the stretching of yarns or fabrics has always been a problem.

"Rhea fibre does not shrink from moisture. This is a very desirable quality for many uses, not only for mechanical uses but for dress goods or knit fabrics. Strangely enough, however, yarns and fabric made from the fibre will shrink even more than cotton under mercerizing treatment, but at the same time the mercerizing does not add materially to the lustre, but does increase the ultimate strength.

When the fibres are pressed together they are more resilient than cotton or any other non-tubular fibre. This is one of the qualities which makes the fibre suitable for calender rolls and gives the roll a very desirable elasticity and resilience when the fibres are set up under pressure in the manufacture of rolls. This particular quality was discovered more or less by accident. Previously it had been thought that as the fibre was non-elastic additional pressure would have to be used in making the rolls as compared with cotton. Later experience showed that even less pressure was required than was needed for cotton rlols.

Spun on Wool System.

"I know, of course, that you would be interested in the details of handling and spinning the fibre into various textile yarns, but as this is a long story in itself and the available time has been more than used, I will merely state that it is being spun on the wool system both with and without mixture of other fibres in numbers up to about 8s cotton; that a new system is being developed somewhat along the lines of the cotton system for handling short fibres not over three inches in length; that long fibre spinning is being carried on by the National Rhea Company, of Putnam, Conn., on special machinery for handling long fibres, producing numbers in cotton sizes from 5s to 30s, both dry and wet spun (the yarns produced being somewhat similar to linen). The fibre has been spun on both the spun silk system and flax system, but as the spun silk system is too expensive a method of spinning long fibre and the flax system too antiquated, it is not practical to use either system in producing commercial yarn. The flax system, like flax retting, has not been materially altered or improved for many years, and in this again you will see the writer's contention that deflation must be brought about by reduction in methods rather than deduction in compensation. The chemical retting of flax is at hand. Improvements in the method of spinning flax, I venture to say, are only a question of time."

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Points on Shuttles

By Reuben Halstead, before Burnley Mill Managers' Association, England.

IT is very important that we look upon the shuttle as something more than merely a conveyance for carrying the weft from one side of the loom to the other. We should bear carefully in mind the different effects set up while the shuttle in in motion. Now the shuttle, whilst in motion, subjects the weft to all sorts of conditions — conditions which would not prevail if the shuttle could be stationary. Let me point out one or two of the many evils existing, and in some cases due entirely to faulty design in the shuttle —broken picks, weft blacking, ballooning and the greatest evil of all, lashing of the weft. The shuttle cannot remain stationary; but must be whiped to and fro at a very great speed, a surprising speed, something like 20 to 30 miles per hour, and at every few feet this shuttle containing the weft must be drawn to stop and sent on its return journey. What disturbances must take place every time this shuttle is brought to a stop can only be surmised; but imagine yourself rushing along in a car, to be drawn up suddenly and flung back in the oposite direction; that is the sort of disturbance taking place with the weft, not once in a day or once in a hour but something like 200 times every minute. These disturbances cannot be overcome entirely, but they can be reduced to a take again, for example, some vehicle travelling at 20 to 30 miles an hour; the disturbances that one is subject to are very numerous, and the first thing that comes to our mind is, we shall have to get a wind screen of some sort to protect us. Our next journey is done at the same speed, but this time we are in a closed car, sheltered and protected, therefore we are not subjected to any disturbances created by air pressure. This obtains exactly the same with the weft; so it behoves us to shelter and protect the weft as far as we possibly can. If you are satisfied that the type of shuttle you are using is so designed to give the most protection, the next effect may be dealt with. To my mind the next effect is the most serious because of the great difficulty in overcoming it. It is absolutely impossible to remove the cause, and no matter how your shuttles are designed the effects still exist. I am now referring to the pick as the cause, that is, when the shuttle is sent on its journey across the loom a certain momentum is effected—a movement in one direction takes place both of shuttle and weft. This movement continues until the shuttle enters the box, when it is checked, stopped and sent on its journey. Although the shuttle has been brought to a stop the weft, or at least that portion which has left the cop, continues in the direction the shuttle was going, that the momentum of this weft continues in one direction, even although the shuttle has been sent in the opposite direction; now this sets up a whipping effect, which is called lashing. We must, therefore, seek to have some method of having constant control over the weft, both what is inside the shuttle and out. If we can find some means of doing that, we shall have most certainly overcome a very great evil. This effect or trouble is shown up most plainly with artificial silk when we get, especially on the off side, with a cloth requiring a heavy pick, a bursting of the weft which shows quite plainly 6 in. to 8 in. from the selvadge. To my mind the best remedy we have for arresting these disturbances created by the shuttle in motion is by filling in the shuttle wherever the cop will allow. If this does not overcome the trouble, a strip of fur may be applied with advantage. We have now overcome, as far as it is possible, the evils existing inside the shuttle; we turn our attention to that part of the weft outside the shuttle. As already stated, the longest length of weft is exposed when the shuttle enters the off-side of the loom. If we could introduce some satisfactory means of collecting that length of weft and holding it in the side slot until it was delivered to the cloth we should have accomplished a grand thing, and a great help to the trade generally.

When ordering your shuttles it would undoubtedly be of great assistance to the shuttle makers if you stated whether for fast reed or loose reed looms, because in the fast reed loom the shuttle is called upon to perform more duties than obtain with the loose reed, and, therefore, the shoulder should be left a little shorter, leaving a good back. In the loose reed we invariably get a greater speed; for that reason we should turn the shuttle slightly smaller and longer at both ends, therefore giving it a better chance of entering the shed without disturbing the edges. A shuttle made from the check loom should have, in all cases, a blunt tip at the end which enters the circular box, to so reduce the wear of picker in the turning movement of box, and better ensure a true delivery of shuttle.

It is very important from the shuttle point of view that the sleigh is laid true and absolutely linable with the bottom box plate. We do find sometimes where the box plate

(Continued on Page 34)

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Cotton Mill Processes and Calculations

By D. A. Tompkins.

Copy Revised for Third Edition.

(Continued from Oct. 8th Issue)

The production of a fly frame may be also figured from the hank clock, as follows:

Divide the product of hanks per spindle, as indicated by the hank clock, and the number of spindles, by the hank roving.

Example: A clock on a 60-spindle slubber registers 70 hanks of .60 hank roving turned off in a week. What is the production in pounds?

$$\frac{70 \text{ x } 60}{160} = 7000 \text{ pounds production.}$$

128. Concerning calculations on fly frames in general, it may be said that very few overseers, or even superintendents in the mills, have that easy familiarity with the subject that gives them the courage and inclination to go through the calculations and see that every adjustment is exactly right. When machines are ordered the shop is generally given full information as to the character of work to be done, and they are supposed to send proper gears with the machines. Men are sent out from the shop to set the machines up and adjust them to the work required. Usually only small changes are necessary to fit the limited changes required in one mill. Overseers usually make changes by "rule of thumb." If one gear does not make the machine go right, another and another is tried until it seems right.

It need scarcely be pointed out that this method is not the proper one.. While the result may seem to be all that is necessary, much bad work developed in the after processes may be traced back to imperfect adjustment on the roving machinery.

Much ingenuity has been expended on roving machinery to make it automatic and regular in all its movements. If any particular machine requires constant manipulation to make it turn out regular work, either the machine or the operative needs immediate attention.

Too much stress cannot be laid on the matter of keeping the tension right. There is always a temptation to let the machine run as long as the ends will stay up, but this is no criterion; for it is quite possible for the ends to stay up, while there is great unevenness of tension.

Short Methods.

129. In the actual operation of a mill, it is not always necessary to make complete calculations as for a new machine. If a machine is running and producing satisfactory results on a certain hank roving, and it is required to change the gears to produce another hank, it is sometimes done by the use of constants and sometimes by the rule of three. The use of constants has been fully discussed in connection with all of the preceding machinery.

DRAFT.

In making new draft calculation, it has been shown that a certain allowance is necessary for contraction. But in the case of a frame already running, a calculation may be made by the rule of three, which will include all allowance and give the correct result at once. For example, a frame is making 3

(Continued on Page 18)

King Cotton's Children

It is a far cry from those dim days in 1621 when Virginia planted her first cotton. Jamestown quoted this "cotton wool" at 8d a pound.

Now cotton is supreme—the greatest money crop of the nation.

Five million adults are employed in producing, manufacturing and distributing cotton and its products. Each has an average of three dependents, all looking directly to cotton for a livelihood.

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Indirectly every man, woman and child is interested in cotton. And facilitating its distribution has been a major task of commerce.

Chicago's cotton futures market was created to serve an economic purpose. Its contract was drawn to meet the needs, present and future, of a shifting cotton empire, rapidly centralizing in the Southwest.

Delivery on this remarkable contract is made at Galveston or Houston, the giant basin of concentration, the biggest cotton exporting point in the world.

It is a contract that proves advantageous to spinners, growers, merchants and shippers, and hence benefits the entire industry. Were it not basically sound and commercially attractive, Chicago's new cotton market could not have risen to its present position in a brief period of ten months.

Write the Cotton Registrar, Chicago Board of Trade, for full information. Grain literature may also be had on request.

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Practical Discussions
By
Practical Men

Power Saving.

Editor:

Does it pay to invest the extra amount of money involved to change over our power driving arrangements. We seem to have too much shafting and too many belt holes. How about installing ball bearing boxes in our hangers? About what per cent would it save us? Old Style.

Matching Cloth Samples.

Editor:

I am a designer. I was asked to make a new piece of cloth to be of a different construction, but to be made from the same colored yarns as I have made other goods. And they want this new piece of goods to be of exactly the same shade as the color of the cloth I have been making. What puzzles me is why the new sample is not of the same shade of the old cloth I've been making when using the same colored yarns. The only difference is that the new goods have less ends per inch, and less picks per inch, but the cloth looks paler than the old cloth does. The tone is not so full and rich. Why is this? The help of some other colored goods designer will be much appreciated.
Designer.

Answer to W. T. D.

Editor:

If W. T. D. will carefully examine his slashers, he will find that the general limit of production from his machine depends upon the drying capacity of same. I took one mill where this same condition existed and here is the course I pursued and thus saved the company the price of a new slasher. I speeded up the drying paddle fans 25 per cent. Then I put in another fan between the two drums or between the big and the smaller drum. I never had any further trouble about keeping up after that procedure. Try it for yourself and see what it will do for you. Boston.

Answer to Carder.

Editor:

There is a good reason for operating the modern revolving top flat cards at a cylindrical speed of 165 R.P.M. It is because, after a repeated series of tests, this has been found to be the all-around best speed for all cards consistent with the present size of the cylinder, and the average amount of cotton put through these machines under modern practice. A higher speed would cause the waste of more good fibres on account of the higher centrifugal farce. While a slower speed would not throw out the dirt and foreign matters up into the top flats so well. Higher speeds have often been tried. Some mills even now run their card cylinders as high as 1 per cent or so. But it is not best to do so.

Regarding a slower speed, some mills have operated their cards at a speed of 140 or less R.P.M. and then stripped them only once per day or two or three times per week. This shows that a slower speed permits the dirt to go through and which may be all right on cheaper lines of goods. Speeder.

Answer to Capital.

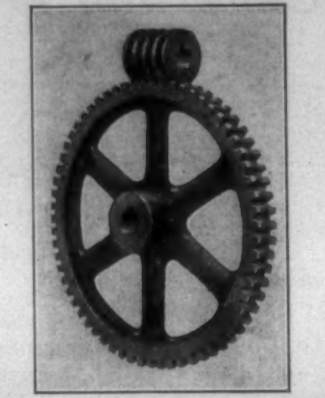
Editor:

You have asked quite a broad question. It is impossible to give definite advice on the details of this because there is so much to be considered along the line of your question. Some can be answered only in a general way.

First, you must decide which branch of the trade in colored goods you feel that you would like to attack. There are quite a few large fields for making different kinds of colored goods, as follows:

1. Printed fabrics.
2. Filled goods.
3. Dyed in the yarn.
4. Dyed in the piece.
5. Dyed in the raw stock.
6. Bleached in the yarn.
7. Bleached in the raw stock.
8. Bleached in the piece.
9. Hand painted goods.
10. Machine painted goods.
11. Stained fabrics.
12. Embossed cloth.
13. Enamelled goods.

Each of the above involves a different equipment of machinery above the carding and spinning departments. And the equipment will also depend upon whether you want to make any of the lines listed below: Dress goods, shirtings, awnings, bed spreads, blankets, robes, book cloths, map fabrics, oil cloth, and many other distinctive organizations. It is up to you to decide which is the best line to make by looking up market conditions, consumption, prices and possible profits. We should judge that we had enough colored goods mills now. But none of them are what might be called 100 per cent perfectly arranged for the convenient handling of the work from a start to the finished article. Therefore, a strictly up-to-date model plant might pay over and above an old plant. This might be your only excuse for breaking in on the game.
Practical.



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Worm Gears
3 pitch 18 inches or smaller.
Helical or Spiral Gears
3 pitch 18 inches or smaller.
Worms of all kinds.

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Send drawing or sample gear.

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in
Less Time
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Let us send you a sample and prices.

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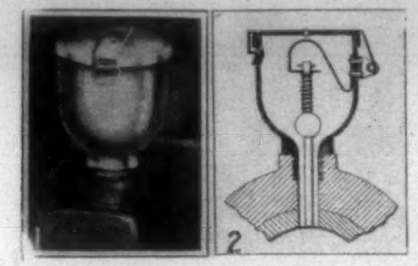
Automatic Lubricator

A grease cup with a device for automatically regulating and assiting the flow of lubricant, has been brought out by the Malcom H. Smith Co., Inc., 50 Congress St., Boston, Mass, The cup is known as the "Knorr' lubricator and is intended to be used on bearings where constant and uniform lubrication, without overflow and drip, is desired. Its use has proved to give savings in lubricants and labor, besidles saving material from oil stains.

The regulating device is simple in construction and operation. (See the accompanying diagram.) A small brass rod known as the feed-pin extends down through the hole in the bottom of the cup and rests on the top of the revolving shaft. It is held against the shaft with light tension by means of a small elliptical spring within the cup. The rotary motion of the shaft causes the pin, through vibration, to bounce up and down; and a ball on the upper part of the pin, located in the midst of the grease near the feed outlet, agitates the lubricant and assists it to flow around the pin to the shaft. When the shaft is stopped, the agitation or pumping effect of the pin ceases, and the flow of the lubricant is discontinued.



Knorr Lubricator.

The cup Is provided with a cover and ratch and is made of a hard aluminum alloy. The elliptical spring, made of flat spring steel, is riveted to the side of the cup. The connection of this spring to the feed pin is made through the medium of a small helical brass spring which surrounds the upper part of the rod and rests on the ball.

The Knorr lubricator has been shown to give satisfaction on a wide range of speed. One of the most important features is the elimination of oil-drip, an important factor in textile manufacutring. The cup is made in a two-ounce size with a ⅞-in. and ¼-in. pipe thread, and in a three-ounce size with a ¼-in. thread.

Meeting of Middle States Manufacturers

The Middle States Textile Manufacturers' Association, with twelve of its twenty membership mills represented, met at the Pendennis Club, Louisville, Ky., last week, for the annual business conference of the organization, which meets once each year for a round table discussion of crop, technical, marketing and general conditions. The association is composed of mills scattered through six States, including Kentucky, Indiana, Illinois, Ohio and Missouri, and while small in number, represents a big investment, in big capacity mills, headed by some of the keenest executives in the business.

Numerous matters were discussed, and those affecting legislation were the subject of resolutions endorsed by the organization.

The principal discussion was in regard to the statistical information being compiled by the Association of Cotton Textile Merchants of New York, which has the full support of the Middle States Association, and which was on the program for discussion.

Other discussions were on labor turnover, wastage, mill losses in cloth room, making textile work more inviting for the worker, cost of manufacturing to be figured on yards, not pounds; cotton, crops and prices, legislation, and Government estimates.

Officers elected: President, C. N. Brown, of the Lincoln Cotton Mills, Evansville, Ind.; vice-president, C. N. Poore, Louisville Cotton Mills, Louiscville, Ky.; secretary-treasurer, Lee Rodman, Indiana Cotton Mills, Cannellton, Ind.

Those present included Lee Rodman, Cannellton, Ind.; C. N, Brown, Evansville; C. A. Young, Indianapolis; Michael Bettinger, Tell City, Ind.; Philip S. Tuley, Louisville; C. Poore, Louisville; S. H. Stone, Louisville; Alex Sample, Louisville; W. G. Young, St. Louis; J. B. Young, Bemis, Tenn.; Richard Johnson, Madison, Ind.

It was the opinion of the gathering that to improve plant conditions and invite labor to enter the plants that work rooms should be made more attractive through paint and clean up progams, light, good air, good toilets, plumbing, lockers, showers, etc., and that plant grounds should be kept attractive, instead of looking like ash heaps, as is sometimes the case.

C. A. Young led a discussion opposing wastage in mills, through guessing, instead of tabulated returns as to waste, which most mills underestimate, regardless of the important bearing on costs.

Losses in cloth rooms were alleged to be largely due to poor operators in such rooms, or failure to check and condition weighing and measuring equipment, which must be kept in perfect condition as protection for both buyer and seller and in preventing misunderstandings.

It was held that cost must be figured on the yard basis, rather than on the pound basis, as sales and deliveries are on a yardage basis, not a pound basis, and the pound basis causes trouble due to some goods running a fraction heavy or light, generally heavy, with the result that cloth is not running correct yardage per pound.

RAYON REEDS

On account of the ever-increasing use of Rayon (artificial silk) by Southern cotton mills, we are making a reed particularly adapted to the Rayon yarns.

Special attention is necessary to the finish on the wire used in these reeds, which finish requires approximately three times the length of time usually given to regular reed wire.

There is, however, absolutely no extra charge for this special finish as we invoice Rayon reeds at our regular standard prices.

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Heddles—Harness Frames—Selvage Harness—Leno Doups—Jacquard Heddles—Lingoes—Improved Loom Reeds—Leno Reeds—Lease Reeds—Beamer Hecks—Combs.

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On account of being low in soap content, it is not decomposed by hard water, and trouble with insoluble Lime or Magnesia soaps is therefore avoided. For the same reason it is not thrown out of solution by acids, or chemical impurities of dyes or other things, which would render an ordinary sulphonated oil completely unfit for use. This feature also prevents foaming.

The Acid Test

In order to be sure that a sulphonated Castor Oil is properly made, so as not to be thrown out of solution by acids or other chemicals, a simple comparative test is very enlightening, as follows:

Take about 10 grams of Monosulfol Oil and 10 grams of any competitive oil. Dissolve each of these in 30 grams of water and stir thoroughly. Now add about 10 grams of 28 per cent Acetic Acid and stir in. The Monosulfol solution will remain without change, while the other oil will curdle and separate, floating out free oil to the surface.

This test not only proves the superiority of this oil for use in acid solutions, but is a proof of care and skill in sulphonation. Any oil which will not meet this test is dangerous to use, as it is liable to be effected by many chemical substances which would decompose it and weaken or ruin it for its intended purpose.

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Cotton Mill Processes and Calculations

(Continued from Page 15)

hank roving and the draft gear in use is 58, what gear is necessary to produce 4.80 hank.

The required hank is to present hank, as present gear is to required gear, thus: 4.80: 3.00: : 58: ? This works out 36.2, and means that a 36 gear is as near as possible, with all allowances made.

TWIST.

As there are no allowances necessary in the case of twist, the calculation by constants is the easiest. But if the constant is not knwn, or if for any other reason it is desired to work it out by the rule of three, the required twist is to the present gear is to required gear. For example, if frame is now making roving with a twist of 4.10 per inch, and a twist gear 60: and a roving is required with a twist of 2.00, it is stated thus: 2.00: 4.10: :60:? This works out 123, and means that a twist gear with 123 teeth will produce a twist of 2.00 per inch.

This question has usually been made much harder to understand than it should be, on account of mixing up square roots in the problem. When the tyist per inch is stated in both cases, as above, squares and square roots have nothing to do with it. If a frame is now running with a 70 twist gear making 4 hank roving, the twists correpsnding to these hanks vary according to the square root of the hank in each case; but it is

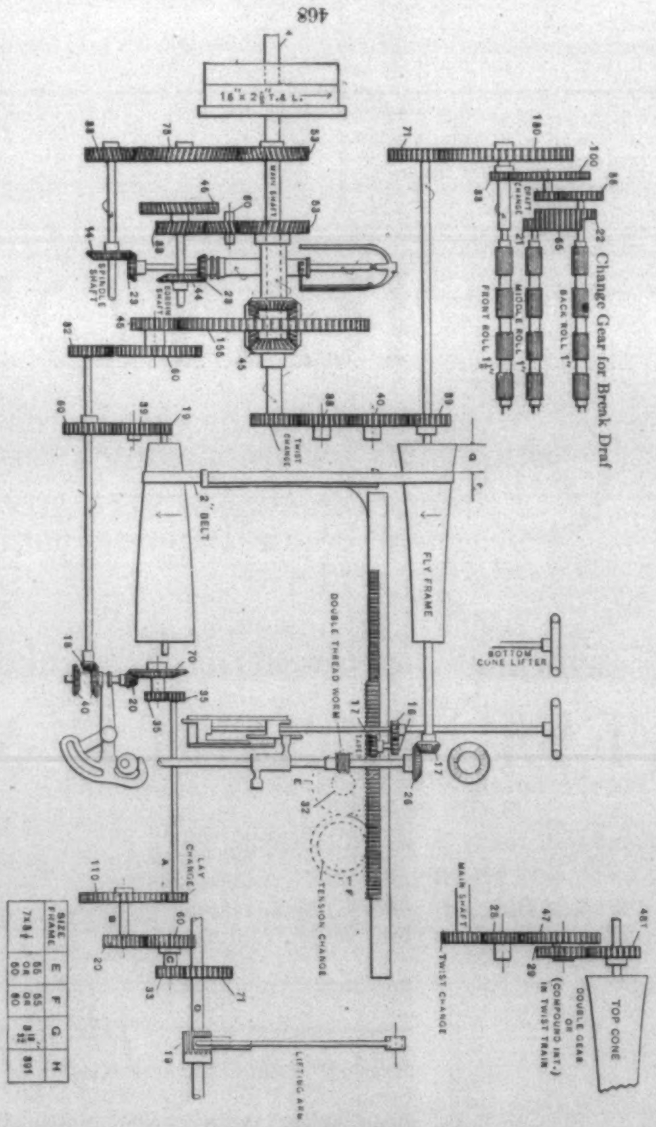

Fig. 29. 7×3½ Fly Frame

better to find what these twists are from the table before taking up the question of the gears; and thus the question of square root is eliminated from the simple rule of three. But i fdesired, it can be all worked together, thus: square root of 4: square root of 3: :70: ?; or 1.73 :2: :70:? This works out 81, which is the twist gear required.

LAY.

Exactly the same methods may be pursued in working out a change of lay gear and tension gear as in the case of twist gear.

Other Makes of Fly Frames.

130. The various makes of American-built machines differ in some details of construction, but in general are similar to the machine just described. Fig. 29 is a diagram of the general gearing of the Saco-Lowell Frame.

One difference to be noted is the method for lifting the rails. The Lifting Shaft is supported by bearings close to each lifting pinion; this shaft runs the whole length of the frame, but is driven from the center, thereby diminishing the torsion to a negligible quantity. Cut pinions on this shaft engage with cut-tooth lifting arm sargents, which in turn apply the force of the lift under the center of gravity of the load, the bolster rail. The lifting driving train runs on a sleeve, loose on a fixed shaft, which prevents any cramping in case of settling of the mill floor. The whole combination results in a perfectly steady

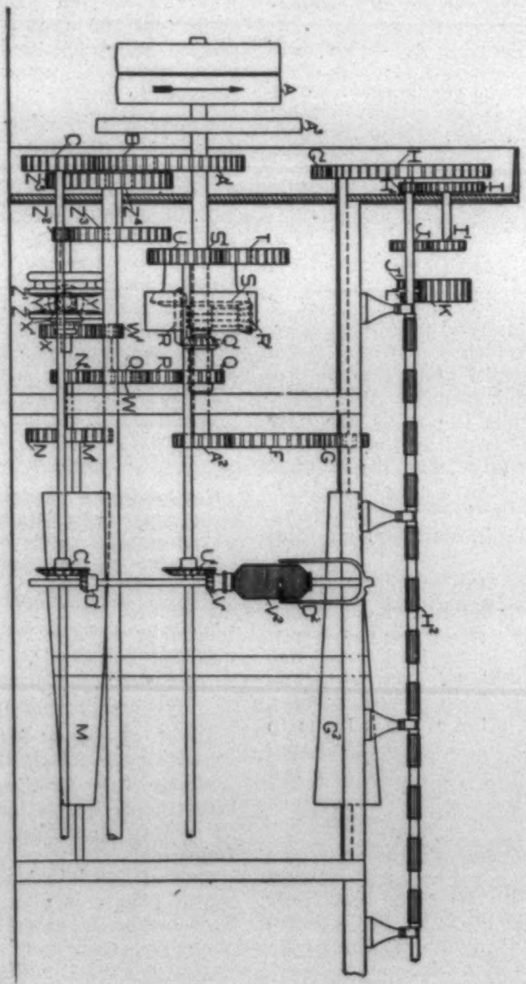

Fig. 30 (a)

Front Elevation of Head End Gearing—Roving Frame

(Continued on Page 25)

SUPERINTENDENTS AND OVERSEERS.

We wish to obtain a complete list of the superintendents and overseers of every cotton mill in the South. Please fill in the enclosed blank and send it to us.

______________________________1923

Name of Mill______________________________

Town______________________________

__________Spinning Spindles__________Looms

______________________________Superintendent

______________________________Carder

______________________________Spinner

______________________________Weaver

______________________________Cloth Room

______________________________Dyer

______________________________Master Mechanic

Recent changes______________________________

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A dependable assistant in sizing Cotton Warps
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Bosson & Lane
Works and Office , Atlantic, Mass.

LIBERTY MUTUAL INSURANCE COMPANY
W. R. Pederson, Resident Manager
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SOUTHERN
TEXTILE BULLETIN

Member of Audit Bureau of Circulations
Member of Associated Business Papers, Inc.

Published Every Thursday By
CLARK PUBLISHING COMPANY
Offices: 39-41 S. Church St., Charlotte, N. C.

THURSDAY, OCTOBER 29, 1925

David Clark	*Managing Editor*
D. H. Hill, Jr.	*Associate Editor*
Junius M. Smith	*Business Manager*

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Government Reports

THE Government cotton crop estimates of this season have been absolutely rotten and there is a temptation to join in those who are severely condemning them but the estimates of the Government have been fully as good as any of the private estimates and we believe that we had rather have the Government estimates, as inaccurate as they are, than to be at the mercy of the private estimates, most of which are rank guesses, made almost solely, for their effect upon cotton future movements.

A crop estimating board with all the facilities of the Department of Agriculture at their disposal stated at one time that the probable crop was 13,300,000 bales and now without any unusually favorable weather having prevailed the same board says the crop will be 15,226,000.

Although unfavorable weather and a killing frost has prevailed during the past fifteen days they increased their estimate by 500,000 bales.

Before, however, we "cuss" the Government too much remember that less than sixty days ago the McFadden Company with all of its agents and facilities for securing accurate data, estimated the crop at 13,300,000 and at about the same time the New York Journal of Commerce placed the estimated yield at 12,879,000 bales.

Only this week Miss Giles and most of leading private estimators placed the size of the crop at around 14,600,000 bales.

Our readers will recall that repeatedly during this season we have stated that the spotted condition of the cotton belt this season made it extremely difficult to form an accurate idea of the probable yield and we also emphatically stated that we would not express any opinion relative to the course of cotton prices.

Arno Pearse, Secretary of the International Federation of Master Cotton Spinners and Manufacturers' Association, upon his recent return to England severely criticised the U. S. Crop Reporting Board and stated that he attended, by a special permit, when one estimate was made and that, after the figures were compiled from the correspondent's reports, several members of the Board wanted to arbitrarily reduce the estimate and would probably have had it reduced if he had not been present.

The low yield estimates of the Government have certainly benefited the farmers, for more than 10,000,000 bales were ginned and most of it sold before it was discovered that the crop would be above 15,000,000.

There are also many mills in this country and abroad that were induced by the low estimates of the Department of Agriculture to contract for large quantities of cotton that now shows them a loss of $10 to $15 per bale.

Most of those who complain about the Government reports make their chief complaint against their frequency but on that point we differ with them.

We condemn the inaccuracy of the reports but it was much better to have a 14,700,000 estimate sandwiched in between a 13,900,000 and a 15,226,000 estimate than to have had the shock of a sudden increase as would have been the case if there had been no intermediate estimate.

Had there been no intermediate estimate many mills would have been loaded with larger purchases of cotton induced by the idea of a smaller crop by the intermediate estimate of 14,700,000 cause them to hesitate and we contend that frequent estimates are best for the industry.

If there are no intermediate Government estimates there will be intermediate private estimates which are more inaccurate than those of the Government.

Had there been no 15,226,000 estimate this week, mills would now have their cotton purchases influenced by the 14,600,000 estimate of Miss Giles and others and we believe that it is best to have frequent Government reports as inaccurate as they have been proved.

The big cotton speculators are conducting propaganda against frequent estimates because the absence of such estimates will allow them to more greatly influence the market through their own estimates.

Machinery and Supply Men Meet

THE enclosed letter from the American Wool and Cotton Reporter has been received by many mills:

AMERICAN WOOL AND COTTON
REPORTER.

Boston, Mass.,
October 19, 1925.

Every Textile Mill in the
United States.

Gentlemen:

Without any obligation whatever on your part, the American Wool and Cotton Reporter is going to try to help you buy machinery and mill supplies at a substantial discount.

If you will write us by return mail, sending us the names and addresses of the concerns from whom you purchase various commodities at the present time, together with the names of the commodities purchased from each concern, we will help you start the ball rolling.

With personal regards, we are

Yours for co-operation,

(Signed) C. RANDOLPH BENNETT.

Having exposed the wickedness of the sizing compound manufacturers, it appears that they are now going to show the mill men how to buy machinery and supplies. the inference being that the mills are now greatly overcharged by the machinery and supply men, and that neither the treasurers or their purchasing agents have enough sense to buy the equipment and supplies they use.

Having seen the financial statements of some machinery manufacturers and the losses they suffered last year, we know that there are some who could not give "substantial discounts" from present prices.

The above letter appears to us to be very unwise and to be calculated to arouse suspicions that are not justified.

The Ford Makers

THE English are noted for their egotism but one can but admire the pride that many of them take in their workmanship.

Some fifty-three bells were recently presented and installed in the Park Avenue Baptist Church in New York by Mr. Rockefeller. They are various in size and weight, the smallest weighing but eighty-four pounds and the largest nine and one-half tons. They were cast at Croyden, England, and are beautifully sweet and clear in tone. The makers were justified in being proud of their work, and evidently they were, for on arrival the bells were found to be chalk-inscribed with various inscriptions, among which was this British boast: "You may make Fords but you can't make bells like these!"

We can imagine an English overseer writing on a case of high grade 30s hosiery yarn made from single roving "You Americans can weave sheetings but you can not make 30s yarn from single roving."

The English overseer knows that he saves his mills at least a half cent per pound by "knowing how" and he wants the American overseers to keep on "not knowing how" and believing that it can not be done.

Cloth Imports Last Month

Cotton goods imports last month totalled 4,514,990 square yards, according to the classified figures of the Department of Commerce. The total shows an increase of about 1,250,000 square yards, as compared with August. The September imports last year were 11,117,145 square yards.

Of broadcloths imported last month, there were approximately 2,750,000 square yards, compared with 1,938,369 square yards in August. During September, 1924, there were 6,927,000 square yards imported.

Under the heading of lawns, organdies, nainsooks, cambrics and similar fine goods, 925,395 square yards were listed during September. The imports of sateens totalled 306,319 square yards, compared with 396,644 square yards in August. During September of last year there were 2,332,000 square yards of sateens imported.

Voile imports last month totalled 254,573 square yards, against 221,890 square yards in August and 323,000 square yards in September, 1924.

Gingham imports last month showed a moderate increase, being 101,684 square yards, against 24,609 square yards in August. There were 76,733 square yards of crepes shipped here in September, compared with 65,957 in August and 185,000 in September, 1924. All other imports, including ratines, Swisses and jacquards, combined, totalled 94,409 square yards last month.

A New Rayon

Under this heading the current bulletin of the National Association of Cotton Manufacturers has the following:

One of the latest additions to the rayon family is a product made in Switzerland from a viscose basis. A peculiar feature of this type of rayon is that the filaments instead of being solid are hollow or macaroni style. The photomicographs show the ordinary viscose filament and the new type of filament enlarged 500 times.

According to the American agent the 100 denier has 24 filaments and the 150 denier 44 filaments. The yarn comes with both warp and

Personal News

G. C. Batson has been promoted to outside overseer at the American Spinning Company, Greenville, S. C.

C. P. Snoddy, of Laurens, S. C., is now second hand in weaving at the Lydia Mills, Clinton, S. C.

R. A. Littlejohn has resigned as overseer weaving at the Lydia Mills, Clinton, S. C.

J. W. Mosey has been promoted from second hand to overseer weaving at the Oneida Mills, Graham, N. C.

L. A. Holt has been promoted from loom fixer to second hand at the Oneida Mills, Graham, N. C.

Woodie Dodson has resigned his position in the card room at the Lily Mill, Spray, N. C.

A. M. McDonald has resigned as superintendent of the St. Pauls Cotton Mill, St. Pauls, N. C.

J. S. McManus has accepted the position of superintendent of the St. Pauls Cotton Mills, St. Pauls, N. C.

W. F. Honeycutt, of Gastonia, N. C., is now superintendent of the Globe Yarn Mill, Mt. Holly, N. C.

J. F. Ooten has become superintendent of the Catawba Spinning Mill, Mt. Holly, N. C.

Blake Crouse has been promoted from second hand to overseer No. 1 and 2 spinning at the Wennonah Mills, Lexington, N. C.

L. L. Loning has been promoted from second hand to overseer of carding in Mills Nos. 1 and 2 of the Wennonah Mills, Lexington, N. C.

A. W. Roper has been promoted from day overseer of carding to night superintendent of the Perkins Hosiery Mills, Columbus, Ga.

E. W. Netherland, overseer of spinning at the Perkins Hosiery Mills, Columbus, Ga., now has charge of the carding also.

R. M. Hughes, from the Poe Mills, Greenville, has become overseer of weaving at the Lydia Mills, Clinton, S. C.

E. M. Dees, from Phenix Mills, Kings Mountain, N. C., is now overseer of carding at Osago Mills, Bessemer City, N. C.

R. R. McCuen has been promoted from overseer carding and spinning to superintendent of the Wennonah Mills, Lexington, N. C.

N. P. Baumgardner, superintendent of the Adrian and Madora Mills, Mt. Holly, N. C., is now also superintendent of the Alsace Mills, of the same place.

C. C. Kiser has resigned as overseer carding at the Industrial Mills, Rock Hill, S. C., to become night overseer of carding and spinning at the Cannon Manufacturing Company No. 5, Kannapolis, N. C.

J. H. Poole has resigned as outside overseer with the American Spinning Company, Greenville, S. C. He had been with the company for 19 years.

Alex Roberts has resigned as superintendent of the Wennonah Mills, Lexington, N. C., and accepted a similar position at the Oneida Mills, Graham, N. C.

A. W. Richardson has resigned as overseer of weaving at the Oneida Mills, Graham, N. C., and accepted a similar position at the Caraleigh Mills, Raleigh, N. C.

J. L. Nelson, who recently resigned as overseer of weaving at the Texas Cotton Mill, McKinney, Tex., has become overseer of weaving and cloth room at the Pioneer Mills, Guthrie, Okla.

W. V. Jones has resigned as overseer winding, warping and finishing at the Norcott Mills, Concord, N. C., to become overseer carding and spinning at the Anchor Mills, Huntersville, N. C.

A. W. Taber, who has for several years been connected with the indicating and recording instrument business as a sales engineer for the Foxboro Company, Inc., in their Boston territory, has been appointed Southern district manager in charge of the company's office recently transferred to the Atlanta Trust Building, Atlanta, Ga.

Mrs. A. A. McLean.

Mrs. A. A. McLean, one of the most prominent women of Gastonia, N. C., died at her home there last week. She was the widow of the late A. A. McLean, well known cotton manufacturer of Bessemer City, N. C., who died some months ago.

Harry C. Meserve Dead.

Harry C. Meserve, secretary of the National Association of Cotton Manufacturers, died at a hospital in Boston on last Friday following an operation.

Mr. Meserve was widely known throughout the cotton industry in the United States and was regarded as an authority on New England textile conditions. He had a large acquaintance among Southern mill men who will learn with much regret of his death.

Foxboro Opens Atlanta Office.

The Foxboro Company, Inc., of Foxboro, Mass., manufacturers of indicating, recording and controlling instruments, announce the transfer of their Southern office to Room 426, Atlanta Trust Building, Atlanta, Ga. This office, which was previously situated in Birmingham, will be in charge of A. W. Taber, who has for several years been connected with the Foxboro Company as a sales engineer.

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The Users' Viewpoint

A consistent growth in our user list—from year to year—pictures in simple terms the highly satisfactory results that are being obtained from GLUANTINE and TALLOW SOLUBLE.

These two warp dressings—combining common sense softening and binding properties—were created and perfected by men who understand your problems intimately through years of research and actual mill contact.

Coupling science and practice in this way, with raw materials and chemicals, the best that money can buy, must of a surety give to the user that sense of safety in buying and faith in the maker.

The stringent control ever maintained by our textile laboratories throughout each stage of the manufacturing process, gives added assurance to the user as to uniformity and quality.

These all-important factors are greatly contributing to new standards set in weaving production; finer bleached and finished fabrics and—as a matter of course—bigger profits for the cotton mill.

Our sales offices and warehouses are located in the principal centers of the textile industry. Write to our home office of your problems. Our suggestions may prove of real benefit to you.

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MILL NEWS ITEMS OF INTEREST

Burlington, N. C.—The National Hosiery Mills have been incorporated with a capital stock of $50,000 by Ralph Kerr Lashley, Edwin W. Lashley and Walter L. Anderson.

Belmont, N. C.—The Belmont Processing Company has placed an order with Allis-Chalmers Manufacturing Company for thirty Allis-texrope drives to connect Whitin new type quillers to individual motors.

Belmont, N. C.—The Belmont Fabric Company has placed contract with the Allis-Chalmers Manufacturing Company for four Allis-Texrope drives to connect all of the frames to individual motors.

High Point, N. C.—The Southern Fabric Mills, which were recently incorporated here by W. H. Foy, W. G. Foy and I. P. Ingle, will establish a plant to manufacture narrow fabrics and braids.

Durham, N. C.—The Yarbrough Cotton Mills is installing machinery and it is the hope of the management to have the machinery turning out cloth not later than November 1. Three-fourths of the looms have been set up. Novelty goods will be manufactured. The mill was built entirely by local capital and E. S. Yarbrough, formerly of Henderson, is secretary and manager.

Cliffside, N. C.—Work is progressing rapidly on the new finishing plant for the Cliffside Mills. When finished the plant will be one of the most modern and complete finishing plants in the South. The building is 243 feet in length, 50 feet wide, and three stories high. It is constructed of fireproof material throughout. It is built parallel to the main building or mill and the cloth will pass to the finishing plant by a conveyor. The new plant will be equipped with adequate modern machinery for finishing the cloth ready for shipment. The moving of the finishing department to the new building will give considerable space in the mill for new machinery or for storage.

Macon, Ga.—The Bibb Manufacturing Company has just acquired the old Small warehouse and several other pieces of property adjacent to its Mill No. 1 and its general office buildings, east of the Ocmulgee River here. The purchase price for the additional property was $23,000. The warehouse will probably be used to store cotton, which is used in the yarn mills of that company, while the other property will be used to enlarge the company's mill village at No. 1. There has been no expansion of this mill village for several years and during that time this unit of the company has more than doubled in size.

Spray, N. C.—The Nantucket Mill has recently installed 14 additional silk looms which will be placed in operation within a few days. This makes a total of 24 looms in the silk department, twenty of them being the latest model built by Crompton & Knowles. The silk department is being operated day and night.

Elizabeth, Tenn.—Contract for the steel work on the first unit of the rayon plant to be built here by the American-Bamberg Corporation has been let to the Virginia Bridge and Iron Company, Roanoke, Va. Lockwood, Greene & Co. are the engineers.

Greenville, S. C.—When the Mojoto Mills were offered at public sale here, one bid was received, that being by David Kohn, former owner of the mill. The plant has 26 Crompton & Knowles box looms. The sale has not been confirmed by the court.

Chattanooga, Tenn. — The Champion Knitting Mills, of this city, will erect an addition to its plant to represent an investment of $60,000. Plans have been prepared by W. H. Sears, local architect. Bids will shortly be asked for for a two-story and basement building which will have a floor space of 15,000 square feet.

Sand Springs, Okla.—After being closed for some time the Sand Springs Cotton Mills, which were built by a prominent oil producer of Tulsa, and this summer sold to the Miller Manufacturing Company, of Texas, have been formally reopened.

While closed, the Miller Manufacturing Company had the plant renovated and made ready for the continuous run, which C. R. Miller, president of the Miller Company, expects, and which the Texas mills belonging to the company have been operating under from their beginning.

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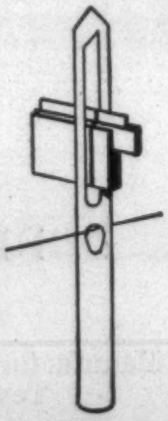

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Supervision of Landscape and Engineering Construction
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Largest Landscape Organization in the South

Rossville, Ga.—The National Yarn and Processing Company, which has been built this summer at the cost of $2,000,000, has begun operations and will continue to increase their employees until the plant will employ approximately 300 workers. A mill village is being built and a number of houses have been completed. Superintendent R. L. McKenney said another large plant would probably be constructed here soon.

Columbus, N. C.—Organization of the Columbus Cotton Mills has been completed with $100,000 capital, and the following officers elected: F. P. Bacon, chairman of the board, Tryon; W. T. Hammet, president, Columbus; W. C. Ward, vice president, Tryon; F. W. Blanton, secretary and treasurer, Columbus; W. P. Cargill, superintendent, Cherryville, and G. J. Nord, engineer, Gastonia.

The company will erect a concrete and steel textile plant at Columbus, a few miles west of Lake Lure. They will manufacture yarns, 2s to 12s.

Shelbyville, Tenn.—Announcement is made of the sale of all the assets and liabilities of the Sylvan Cotton Mills here to the Shelbyville Mills, Inc., recently chartered Delaware Corporation. The new corporation will retire all of the indebtedness of the company, make an expenditure of about $200,000 in doubling the capacity of the plant and resume operations on enlarged basis.

The new company was organized with the election of H. B. Cowan, president, and A. F. Mullins, secretary. New York capitalists are said to be interested in the company. The old company has been operating about 35 years, manufacturing cotton goods and automobile cover materials.

The Shelbyville Mills, textiles, were incorporated at Dover, Del., on October 10, 1925, with a capital of $1,100,000, naming the following incorporators: Harry S. Kossell, Summit, N. J.; Chas. J. Weeber, New York, and Frank C. Taylor, Brooklyn.

Chattanooga, Tenn. — The usual quarterly dividends were declared and the erection of additional houses and an addition to the school building at Piedmont, Ala., were approved at the quarterly meeting of directors of the Standard-Coosa-Thatcher Company. The additional mill houses and the school house addition at the Piedmont plant will represent an investment of about $30,000.

Officials stated that there is nothing further planned for the plants of the company in this city at the present time. The meeting was attended by J. S. Verlenden, president; A. G. Thatcher, chairman of the board, and other out-of-town officials and directors of the company. President Verlenden expressed himself as optimistic over the textile outlook for next year. The company has enjoyed good business during the past year, and has not had to slow down operations, due to lack of power, as this section has not suffered as have the Carolinas and Georgia.

Columbus, Ga.—Work has been started on an addition to the plant of the Columbus Manufacturing Company, located on the Chattahoochee River at First avenue and Thirtieth street that will involve an expenditure of approximately $40,000, it is announced. The cloth room will be enlarged about 33 per cent and new machinery will be installed at a cost of about $20,000, it is announced. The Williams Lumber Company, of this city, has been awarded the contract for the construction work. A basement in the annex to the mill will make it a two-story building. It will be constructed of brick with concrete floor and will be occupied by the shipping department and as a duster room, releasing the entire main floor for use as a cloth room. An elevator is to be installed and other changes made in the mill for modernization purposes. Rearrangements of sidetracks are also planned. The enlarged cloth room will have a floor space of 9,000 square feet. F. B. Gordon is president of the Columbus Manufacturing Company; W. H. Dismukes, of this city, is secretary, and J. S. Wiley, of Boston, Mass., treasurer.

Fort Worth, Tex.—Construction of the Fort Worth Cotton Mills will be started within 60 days and rushed to completion, according to J. D. McInnes, fiscal agent for the mills. The location is on the Mansfield road, comprising 180 acres north of Forest Hill, near the tracks of the Southern Pacific Railroad and accessible to the Cleburne interurban. Consummation of a deal by which Eastern capitalists underwrote the unsold stock of the concern, made possible plans for early construction, Mr. McInnes said. These interests have agreed to immediately bond for $100,000 to be deposited in a Fort Worth bank to cover the fulfillment of the contract. The capital stock has been raised from $1,000,000 to $1,500,000.

Mr. McInnes said Eastern money was interested because of the growing tendency to build cotton mills in the South where the raw product is raised and labor conditions better. New machinery will be installed and in addition it will have the only finishing plant in Texas. It will be one of the largest yet established in the South. Officers and directors of the mill are J. R. Griffin, president; Dr. W. C. Duringer, vice-president; W. H. Slay, treasurer, and B. M. McHarg, secretary. Additional directors are R. C. Sweeney, G. L. Moody, Dallas, and J. C. Spears, Venus, Tex.

Operate With Power From Tractors

In these days of continued power shortage and increasing demand for expedients to keep their plants going full time despite the forced curtailment.

The Oneida Mills, at Graham, N. C., manufacturers of novelty goods, finds that it cannot keep up with orders under the limited operation called for by the shortage of Southern Power Company current. But it has solved the problem by connecting its looms with tractors. quick delivery of cotton products, some mills are resorting to novel They first connected one tractor with the main shaft and adjusted it so that 60 looms would be connected. This means of operation proved successful, and another tractor was called into use and an additional 60 looms put to work. With these looms working full time, this 800-loom mill hopes to keep up with its rush orders. Of course, the full equipment works when power company current is available, which is about three days a week now.

Another interesting development is the temporary installation of gas engines by the Charlotte Knitting Company, of Charlotte, hosiery manufacturers. With the use of this supplementary power the Charlotte concern is able to get in full time.

Jos. Sykes Bros. To Build Plant in Charlotte

Lockwood, Greene & Co., architects, have been commissioned to draw plans and specifications for a building in Charlotte for the American headquarters for Joseph Sykes Bros., card clothing manufacturers, whose home office for 100 years has been at Lindley, Huddersfield, England, and who are represented in this section of the United States by Walter B. Pratt, as manager of the office in Charlotte.

The company has no factory in America but has several repair shops. The company proposes to expand its business in America and bought a lot 75 by 150 feet, at Gold and Mint streets, more than a year ago, with the intention of building its factory and permanent headquarters in America at Charlotte.

Whether the building which Lockwood, Greene & Co. have been commissioned to design will be used as the nucleus of a big manufacturing plant at once was not revealed.

The local office of Joseph Sykes Bros. is in the Charlotte Observer Building. The factory at Lindley, Huddersfield, is exclusively engaged in the manufacture of card clothing used in textile manufacturing.

Patent on Sling Psychrometer

Wm. B. Hodge has just been granted a patent on an improved form of sling psychrometer, comprising some novel features. The increasing importance that is paid to the accurate measurement of temperature and humidity in mills makes this invention of special interest, because the instrument was devised with unusual precautions taken to protect the wet and dry bulb thermometers when the instrument is operated.

The thermometers are mounted on a pressed metal back, which slides into a hollow aluminum handle. This effectually protects the thermometers against breakage when not in use, and the hollow handle forms a substantial support for swinging the two thermometers.

In a special form, this instrument is also arranged with a humidity scale, so that the true calculation of relative humidity from the temperature can be made without referring to any printed chart or table.

There are a number of very practical features embodied in this device, which is being marketed by Parks-Cramer Company.

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Dyeing Silk-Cotton Mixtures

IT is quite often that mixtures of cotton and mulberry silk require to be dyed. Sometimes, a single shade for both fibers is what is wanted. And this is not always an easy job. On the other hand, it may frequently be made more difficult than necessary. If the silk and the cotton both play prominent parts in the finished fabric—that is, parts such that both are in evidence—then the job is apt to contain elements of more or less difficulty. But, if the cotton is out of sight when the fabric is made up and the silk alone is on view, we have a case where the difficulties of dyeing may be cut down.

One or Two Baths—Which?

At one time, it seems that it was practically necessary to use two baths. That is, when only basic and acid dyes were available, the two-bath method was essential, it seems—at least for the generality of cases. It has become of late years more customary to use these dyestuffs merely in an auxiliary way and to use only those colors which lend themselves to the two-bath procedure. Such, at any rate, is substantially what Ganswindt reports.

Substantive dyes—that is, direct cotton colors—have come into favor, largely no doubt because they can be employed by the single-bath procedure.

Dyeing With Direct Dyes.

The process usually employed in dyeing silk alone with the direct cotton colors is inapplicable for our present purpose, since the bath contains sulphuric acid in the free state. The acid in a hot bath would attack the cotton.

Similarly, the usual method of dyeing with the direct colors is also unsuitable. That is, the dye bath containing Glauber's salt and soda is not adapted, because the soda would affect the silk.

A bath is prepared without acid and without soda. Glauber's salt is employed and the bath is neutral. It is desirable, or even essential, to use soft water. If the water is hard naturally, we may soften it by some proper method. One method is to boil the water with a small amount of soda.

The bath may, for medium shades, be prepared so as to have the weight of water 20 times that of the fiber. If the shade is to be a light one, a greater amount of water may be used; and contrariwise, if the shade is to be a heavy one the proportion of water may be lessened.

An unperforated steam coil is the proper thing, as otherwise we would have to provide against the continued weakening of the bath by the condensation of the steam discharged from the perforations.

The prescription of a relatively weak bath for light shades is not to be viewed carelessly: "Light shades equalize better in a dilute bath than in a more concentrated one."

We need to be on the lookout as to some of the direct colors. Certain dyes of this general class do not distribute very evenly—that is, are not level-dyeing. A small addition of soap will often help in such cases. "Many half-silk dyers always use Glauber salt and soap." Where it is proposed to employ this combination, we may use 5, 10 or 20 per cent of Glauber's salt and 1, 2 or 5 per cent of Marseilles soap.

We dissolve the dyestuff in a small amount of water and hold the solution in readiness. We then bring the bath to the boiling point and add the dye. Steam is now shut off.

The fabric is assumed to have been thoroughly dampened. It is now entered and worked about, the temperature being held around 90°-95° C. (=194°-203° F.), "according to depth of shade: 60° C. for light shades, and intermediate temperatures for medium shades."

In the foregoing process, where soap is employed, we secure, it appears, in some cases at least, the result of a retardation of the absorption of the dye by the silk and an increase in the absorption by the cotton. The effect of the disproportionate absorption is that the silk is dyed a shade that is somewhat lighter than that dyed on the cotton. "In this respect, however, the substantive dyestuffs differ among themselves in any event, for whilst most of them dye silk and cotton equally, or nearly so, in a neutral Glauber salt bath, a second group dyes the cotton most, and a third the silk most, under the same conditions, and a fourth series produces different shades on the two fibres. By adding soap to the dye-bath, the conditions are modified in favor of the cotton, in the sense that the cotton is rather more strongly dyed than the silk in all cases."

It can not be said that we have the same behavior with all the direct dyes. In fact, there are certain dyes which dye the silk very little or not at all.

Thus, we may prepare a bath to contain 10 per cent of Glauber's salt and 5 per cent of Marseilles soap. A dye bath made by adding to this

(Continued on Page 26)

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Cotton Mill Processes and Calculations

(Continued from Page 19)

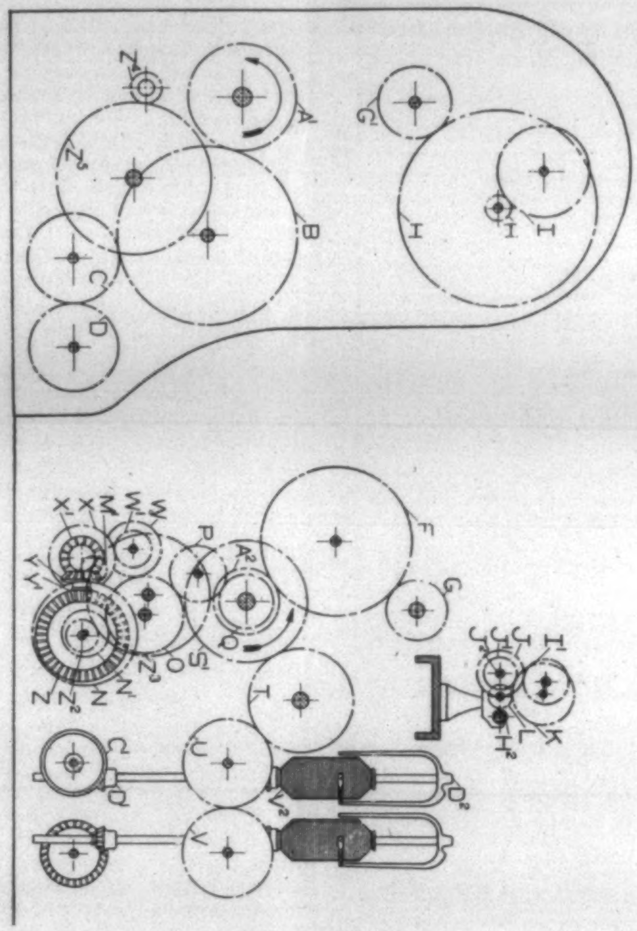

Fig. 30 (b)

Elevation and Section of Head End Gearing—Roving Frame

and easy movement of the bolster rail, carrying the bobbins, and in addition to effecting a saving of pwer produces a very even lay and well-built bobbins.

The differential motion is of the same type as described, but with several improvements. The bobbin train is made up of cut spiral gears, so arranged that cramping is impossible. All parts of the swinging mechanism operate with maximum efficiency and produce a quiet and durable transmission.

131. The Howard and Bullough frame is silghtly different in details. Fig. 30 (a) and (b) show elevations and sections of head and gearing of this type of frame.

(Continued next Week)

Herty Speaks To Textile Students

Dr. Charles H. Herty, president of the Synthetic Organic Chemical Manufacturing Association, delivered a lecture to the students in the Textile School of the North Carolina State College, Raleigh, N. C., taking as his subject, "The Dyeing Industry in America."

Dr. Herty spoke of the dyeing industry before and during the World War and then traced the development of this industry in the United States from its origin to the present time, bringing out the fact that during the war the United States was unable to obtain dyes from Germany so that it was necessary for this country to develop the dyeing industry.

The picture presented by Dr. Herty showed the successful development of the dyeing industry of America so that today America produces 96 per cent of the dyes that are consumed in this country, so that if all the ports were closed to foreign dyes, the United States would not suffer.

Build Belting Plant in Charlotte.

Lockwood, Greene & Co., engineers of New York City and Boston, Mass., have been commissioned by Scandinivia Belting Company, of Norfolk, Va., to supervise the construction of a new plant for the manufacture of cotton belting to be erected at Charlotte.

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N. Y. & N. J. Lubricant Co.	—
North Carolina Cotton	35
Norwood Engineering Co.	34
—P—	
Page Fence & Wire Products Assn.	—
Page-Madden Co.	34
Paige, Schoolfield & Co.	37
Parker, Walter L. Co.	—
Parks-Cramer Co.	—
Penick & Ford, Ltd.	—
Puro Sanitary Drinking Fountain Co.	—
—R—	
Reeves Bros., Inc.	36
R. I. Warp Stop Equipment Co.	22
Rice Dobby Chain Co.	25
Rogers Fibre Co.	12
Root Co.	—
Roy, B. S. & Son	—
Saco-Lowell Shops	11
—S—	
Sayles Finishing Plants	—
Scott, Henry L. & Co.	24
Southern Artsilk Bleach & Dye Works, Inc.	37
Seaboard Ry.	—
Sellers, Wm. & Co.	—
Seydel Chemical Co.	44
Seydel-Woolley Co.	—
Siggers & Siggers	25
Sirrine, J. E. & Co.	—
Slip-Not Belting Corp.	—
Sonoco Products	—
Sonneborn, L. Sons	21
Southern Ry.	—
Southern Spindle & Flyer Co.	—
Stafford Co.	—
Steel Heddle Mfg. Co.	17
Stein, Hall & Co.	13
Sydnor Pump & Well Co.	25
—T—	
Terrell Machine Co.	6
Textile Finishing Machinery	—
Texas Cotton	—
Textile Mill Supply Co.	2
Thomas Grate Bar Co.	33
Tolhurst Machine Works	—
Tripod Paint Co.	38
—U—	
United Chemical Products Co.	43
U. S. Bobbin & Shuttle Co.	24
U. S. Ring Traveler Co.	38
Universal Winding Co.	38
—V—	
Victor Ring Traveler Co.	—
Virginia Machinery & Well Co.	—
Vogel, Joseph A. Co.	—
—W—	
Washburn	23
Washburn Printing Co.	32
Watts, Ridley & Co.	37
Wellington, Sears & Co.	36
Whitin Machine Works	—
Whitinsville Spinning Ring Co.	25
Williams, J. H. Co.	2
Wilts Veneer Co.	38
Wolf, Jacques & Co.	—
Woods, T. B. Sons Co.	43
Woodward, Baldwin & Co.	36

Book Salesman Wanted

We want to get in touch with a salesman, woman preferred, who can sell "The Better Way," "Hearts of Gold," "Will Allen Sinner" and other books of Becky Ann (Mrs. Ethel Thomas) in the cotton mill villages.

The stories of Becky Ann deal with cotton mill life and are very popular in the mill villages. They sell for $1.00 each.

CLARK PUBLISHING COMPANY
Charlotte, N. C.

Dyeing Silk-Cotton Mixtures

(Continued from Page 24)

one of the colors, Benzo Pure Blue, Direct Yellow R, Chloramine Yellow GG, Chloramine Orange G, will dye the cotton but will scarcely color the silk.

Dichroic Effects.

Sometimes, dichroic effects—that is, two color effects—are wanted. In such cases, we may find it useful to use more or less soda. "Every fresh addition of alkali to the bath increases the affinity of the substantive dyestuffs for cotton, and lowers it for silk. If the dye-bath be prepared with 10 per cent of soap and 5 per cent of soda, a large number of the substantive dyestuffs will dye the cotton only, leaving the silk perfectly or nearly white. The dyer has therefore a means of control which enables him to drive the dyestuff more or less on to the cotton and withhold it from the silk. This is undoubtedly interesting, but is of little practical importance, since the purpose of dyeing half-silk is to dye the silk and not to leave it white, except, of course, in cases where dichroic effects are desired."

Continuous Bath.

It appears that the dye baths containing direct colors do not as a rule completely exhaust themselves. This is particularly the case when soap is employed. In order not to waste the ingredients in the bath, we may often use the liquor over again. This is especially permissible where dark shades are being dyed.

When the dye bath is to be used again, we may need to add no more than one-third or one-half the amount of dyestuff employed at the start. And, about all the Glauber's salt and soap that requires to be added is the amount carried off by the work that was removed from the bath. "In the case of soap, however, this applies only when soft water is used, since, with hard water, an allowance must be made for the soap removed by precipitation of lime soaps as well."

While the dye bath may, for quite a time, be used continuously, we are not to go to extremes. A gradual decomposition sets in and this puts a limit on the continued use. "As an alternative to use over again, the baths can, of course, be utilized in the preparation of lighter shades of the same or similar coloss."

Driving the Dyes on to the Silk.

Instead of seeking to accentuate the affinity between the cotton and the dye, we may take precisely the opposite course and endeavor to increase the affinity between silk and the dyestuff. Or, perhaps, it is better to say, that we may have as our objective the reduction of the tendency of the dye to attach itself to the cotton. However we may express it, the effect sought is to get the silk dyed to a greater extent.

We may sour the Glauber's salt to a slight degree in furthering this object. Acetic acid is a proper agent for this purpose. Possibly, formic acid may be substituted, but I am not informed as to this point.

Getting the dyes to act better on the silk "seems a more important consideration than checking their action on the silk, because most half-silk fabrics are woven in such a manner that the silk shows up on the face and the cotton on the back of the material. Consequently, the dyeing of the silk is the chief consideration, and that of the cotton a secondary matter, only the silk lace being visible when the fabrics are made up."

On the other hand, there are other types of fabrics where the cotton is prominent as well as the silk. Such fabrics are cheap umbrella cloths, where the two fibres are interwoven in such a way as to make the one just about as prominent as the other. Then there are fabrics where the cotton is the principal thing in sight, the silk being used, say, for decorative threads and small patterns.

Where the cotton is prominent as well as the silk, then, if one and the same shade is wanted, we naturally keep the requirement of equalizing the dyeing in mind. The one-bath method may suffice for some cases. In other cases, it may seem necessary to use two baths.

Sometimes, we will not quite get what we want with direct cotton colors. Basic dyes may often be brought in to modify the shade and get what is wanted. That is to say, we may use these dyestuffs to shade with and preferably we will employ the same bath.

The cold or lukewarm bath is slightly soured with acetic acid. The basic dye goes into both fibres. Ordinarily, it seems to seek the silk rather more than the cotton. The bath will naturally contain Glauber's salt and may contain soap.

There happen to be, it seems, a few dyes belonging to the acid colors, some of them calling, however, for a faintly acid bath, that may be used in a bath containing soap and Glauber's salt. Such dyestuffs we may expect to be usable for shading direct cotton colors that have been dyed onto the silk in a bath in which Glauber's salt and soap have been employed.

Most acid dyes may be expected to dye both fibres. Nevertheless, there are a few, it seems, which do not color the cotton—only the silk.

Again we may use certain acid dyes for shading the silk in the following manner. We make the bath lukewarm and add a small amount of acetic acid. The acid colors may nevertheless be expected, in most cases, to dye both fibres. It appears, however, that there are a few which can be counted on not to dye the cotton or to produce only a slight effect.

Both the acid and the basic dyestuffs may be employed in dyeing mixtures of cotton and silk. It appears that basic colors are not much used in this connection. If it is proposed to use a dye of this class, the cotton is to be prepared by a mordanting with tannin. That is, the fabric, after having been thoroughly dampened, is entered into a cold bath containing, say, 2 to 4 per cent of tannin. The goods may be allowed to steep for 12 hours. The silk fibre will not accept the tannin from the cold liquor. –Textile Colorist.

Tests for Breaking Strength of Rayon

WILLIAM A. GOSS, head of the Carding and Spinning Department of the Bradford-Durfee School, discusses these tests and their results. Among the interesting findings was that in 98 per cent of the tests the break was lower as the relative humidity became higher, but that the per cent of stretch, taken at the rupture point, became greater.

Mr. Goss's article follows:

The test was made in the School Testing Laboratory which contains all necessary equipment for such work. The equipment consists of an electrically controlled humidity apparatus, a radiator which is automatically controlled for temperature, necessary reels for winding yarn, sensitive weighing scales, drying oven and breaking machines for yarn and cloth, one of these machines having an automatic recording chart, which records the break of each test and shows a curve by which the per cent of stretch may be found. This room also contains a short spinning frame with a variable speed motor, two styles of rolls and all sizes of rings. This arrangement enables the school to make a test for any mill at any given spindle speed, size of ring, kind of rolls and humidity.

The preparation of the rayon for this test was slow and tedious work, the yarn coming to the school in skeins of different deniers. It was necessary to wind from each skein 50 120-yard skeins for each humidity test.

The requirements were that the yarn should be broken under five different percentages of relative humidity—45-55-65-75 and 55 and all at a temperature of 70 degrees.

This required the winding of 800 skeins of 120 yards each. After each skein was wound it was necessary to fasten it in such a way that the yarn would not tangle, it being in winding that some of the yarns were much more lively than others. During this winding care was taken that no undue tension was placed upon the yarn, as this would have destroyed the object of the test. When 50 skeins of one make and count were ready they were tied in bundles of 10, this giving 10 skeins for each humidity test. Each bundle was marked with the kind of rayon, the deniers and the date of winding, these bundles then being hung across the room in groups of five.

After all the skeins were ready the room was conditioned for the first test at 70 degrees temperature and 45 per cent relative humidity, this giving a cotton regain of 6.22 per cent. The yarn was then allowed to stand for four hours before the testing was started and during this time a reading was taken every 30 minutes on the Electric Psychrometer. These readings were also taken at regular intervals during the breaking tests. When the breaking test was about to be started a bundle of each kind and denier was laid on the table and arranged in such a way as to facilitate speed in breaking, there being 10 breaks for each denier of yarn and these 10 breaks completed one chart. The breaks were made on a Scott 1001400 pound tester which had been calibrated, the distance between rolls was 27 inches and the speed pull was 12 inches per minute. As the finger on the machine dial began to move the break curve was being recorded automatically upon the chart. All results were taken and tabulated from the chart, after being compared with the reading on the dial, thereby assuring accuracy.

After this test was completed the room was conditioned for the next test at 70 degrees temperaure and 55 per cent relative humidity giving a cotton regain of 7.16 per cent, and samples of the different yarns broken under these conditions. The same procedure was followed for each humidity, the 65 per cent relative humidity at 70 degrees temperature giving a cotton regain of 8.35 per cent, the 75 per cent relative humidity at this temperature giving a cotton regain of 9.44 per cent and the 85 per cent relative humidity giving a cotton regain of 11.19 per cent.

It was very interesting to note that in 98 per cent of the tests the break was lower as the relative humidity became higher, but that the per cent of stretch, taken at the rupture point, became greater.

In watching the break curve it was very noticeable that the curve ran at an angle of about 40 to 45 degrees for 80 per cent of the total break and then turned to 90 to 95 degrees, but from the point of the turn the yarn appeared to draw out to a much finer diameter before the finger on the dial stopped showing that the rupture had taken place.

The curve also showed a decrease in break at the higher humidities on the 45 degree angle although the per cent of stretch was much more uniform. It was also shown that the yarn with the least per cent of stretch had very little tendency to lose its diameter.

From these observations it is clear that the point where the curve changes from 45 to 90 degrees should be considered the best place to check the break and stretch, as from here the diameter changes and the results in the cloth, using yarn under this tension, would be detrimental to first quality goods, showing brilliant streaks instead of uniform color. There was another point which stressed strongly the uniformity of rayons, each curve had the same line of action. Later some of this yarn was tested using the same starting point on the chart and invariably the curve of those following the first follow the same line on the chart.

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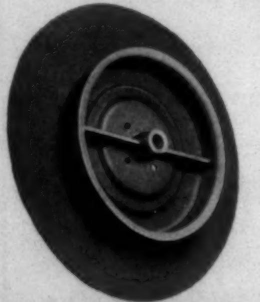

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Co-operation Between Mills and Selling Agents

(Continued from Page 12)

which followed. That we hope will be corrected by these reports.

There are now some sixteen classes of goods—wide print goods, narrow print goods, sheetings, denims, chambrays, pajama checks and various things like that—reported either each week, each two weeks or each month, as the particular group may decide. The entire management of that group is left in the hands of that group, the reports coming from the Association secretary.

There is no question under the decisions of the Supreme Court that this is a perfectly legal function for the Association to take part in. A concerted agreement to reduce production is not legal, but each man's decision as to the wisdom of production, gained by such reports or any other information, he is perfectly free to take, and in that way the Association has tried to advance another step in the cooperative work with the mills.

Bleaching Textile Materials With Hydrogen Peroxide

(Continued from Page 9)

becomes turbid, or causes bubbles of oxygen to be given off, with an observed decrease in bleaching efficiency in the bath.

If the hydrogen peroxide bath is used too strong and the period of bleaching too long, the wool will become pinkish; this defect may be permanently remedied by treatment with sodium hydrosulphite.

Should the bath become acid, the peroxide will develop a dirty brown color o nthe wool; in this case it is an extremely difficult problem to obtain good bleached effects.

Unions of bleached cotton, along with wool, are treated in the same way as woolen goods.

Silk material is bleached in exactly the same manner as is employed for the bleaching of wood. It is, however, advisable to use a weaker solution of peroxide, a maximum of 1½ lb. of peroxide (100 vols.) per 10 gals. of water, and to heat the bath from 30 deg. Cen. to 35 deg. Cen. Silk that has been only partially degummed, such as soupled silk or ecru silk, requires a longer period of bleaching than boiled-off silk, and preferably bleached at a lowtr temperature. Tussah silk and wild silk in general is much more difficult to bleach than cultivated silk. It is olso much more difficult to degum wild silks than cultivated silks. The degumming should therefore be done efficiently before bleaching it. The best result is perhaps obtained by first stripping with soda ash boil, then with soap and water, and finally with a soda silicate bath. The goods are then well rinsed and bleached with peroxide.

The bleaching bath for tussah silk is made up as follows:

For each 100 gals. of liquor one adds 20 lb. of silicate of soda and 10 lb. of hydrogen peroxide (100 vols.) The tussah silk is steeped in this bath for one to two days at a temperature of 20 deg. Cen. to 25 deg. Cen. The silk is now brightened by means of a hot soap bath.

The bleaching effect is improved by working the bleached silk in a hot oxalic bath prior to soaping off.

Rabbits' fur, or, as it is more commonly termed, "Angora wool," is largely bleached wit hhydrogen peroxide. It is advisable to employ a somewhat weawer bath than is employed for the bleaching of wool; too strong a peroxide bath produces a pink color on the material. The spinning properties and the handle of the fur are improved by the addition of 4 oz. per 10 gals. liquor of monopole brilliant oil to the bleaching bath.

Horse hair and many other animal fibres may also be bleached by means of hydrogen peroxide.—Textile Recorder of England.

Cotton Analysis

(Wall Street Journal)

Official estimate of 14,759,000 bales of cotton as of October 1 is 1,019,000 bales larger than that of September 1 However, the size of the crop is not yet decided. There is a chance for the crop to increase still more, and there is also a possibility that the final figures will be considerably reduced.

Where Cotton Increased.

Last year on October 1 the estimate was 12,499,000 bales after October 1, 1924, resulted from unusual weather conditions. The report shows that the increase in September was mostly in Georgia and the central states, as follows, in bales:

	Oct. 1, '25	Sept. 1,'25	Increase in month
Georgia	1,065,000	983,000	82,000
Alabama	1,220,000	1,024,000	196,000
Mississippi	1,750,000	1,350,000	400,000
Louisiana	835,000	644,000	191,000
Tennessee	465,000	437,000	28,000
Arkansas	1,400,000	1,368 000	32,000
Total	6,735,000	5,806,000	929,000

September rains are given as prinipcal cause for improvement of nearly a million bales since September 1. The statement is further made that some Texas acreage previously considered hopelessly damaged will now be picked as a result of the breaking drought. On the face of this report, a continuance of favorable weather might result in a 15,000,000-bale crop.

But there is also a possibility of a considerable reduction from this estimate. Over a million bales of unginned cotton are in the northern fringe of the belt, a grat deal of it dependent upon the frost date. Of the total estimate, there are 5,415,000 bales in Texas and Oklahoma of which 3,200,000 bales yet remained to be ginned on October 1.

Rains brought on a new crop of bolls in Oklahoma, the report says. This adds to the frost danger and the posibilities of a scaling down in the estimate of Oklahoma. Western Texas, according to the report, is late, and an early frost would cause a heavy loss there.

The next ginning report should give stronger evidence of the size of the crop, especially in Texas. To October 1 the Texas ginnings amounted to 48 per cent of the estimated production against 46.9 per cent last year. Since September 1 they have tapered off more rapidly than a year ago, as follows, in running bales:

	Period	Season to Date	Period	Season to Date
Sept. 1	749,276	749 276	630,898	630,898
Sept. 16	532,816	1,282,080	848,510	1,479,408
Oct. 1	599,109	1,881,189	797,716	2,277,124

The figures indicate a rapid completion of the picking of the earlier cotton, leaving the bulk of the estimated crop in the later section which, as the report says, "is late and early freezing weather would cause a heavy loss."

To summarize: Assuming that the official report correctly measured conditions to October 1, a 15,000,000-bale crop is possible under favoring weather conditions. But an analysis of all the figures shows that unfavorable weather and early killing frost might cut the estimate considerably more than a million bales. All the chickens are not yet hatched.

due entirely to the falling off in imports from Alsace Lorraine which droped from about 8,000 metric tons during the first six months of 1924 to less than 4,000 metric tons in the corresponding period of 1925. Cotton piece goods account for about one fourth of the total exports of cotton manufactures and amounted to 9,280 metric tons during the first half of 1925.

New Fales & Jenks Catalogs

The Fales & Jenks Machine Company have announced the publication of two new catalogs, one for spinning, the other for twisting. These books are complete in giving an illustrated and detailed description of the most modern spinning frames and twisters. No effort has been spared in tabulating all the necessary calculations for the operators of these machines. All the older tables have been revised and new ones added. A new cylinder speed table a new table of twist constants and also a new twist gear table has been added to both books. The spinning production calculations have been entirely revised to correspond with the increased efficiency of modern spinning frames and twisters. The twister production table is entirely new and is so constructed that it will serve for any number of yarn and any number of ply. This has been done by using the resultant number of yarn or the number of twisted yarn rather than the number of yarn to be twisted. Both production tables were figured on the basis of data obtained from many of the best mills in the country.

These handbooks should prove to be of great service to all textile executives, superintendents and overseers.

Textile Imports into Canary Islands.

Manufacturers of cotton constituted 64 per cent of the textile imports into the eastern part of the Canary Islands, during the year ended March 31, 1925, according to Consul J. C. Greenup, Las Palmas. England suplied 41 per cent of these cotton manufactures, Spain, 23 per cent; Belgium, 9 per cent, followed by the United States, Germany, and Italy with 8 per cent each. The United States is the principale source of supply for the imports of grey sheetings, blue denim overalls, and silk hosiery. A very comprehensive report regarding the textile trade for these Islands has been received and will be made available upon application to the Textile Division, Bureau of Foreign and Domestic Commerce, Washington. Refer to File No. 184177.

Dry Goods Imports Into Dutch West Indies.

Dry goods imports through the port of Curacao during 1924 were valued at $428,700, of which about 30 per cent came from the United States, Vice Consul S. L. Wilkinson, Curacao, advises the Department of Commerce. Approximately 80 per cent of the total imports into the Netherlands West Indies enter through Curacao. Under the head of dry goods in their import statistics is included in addition to fabrics, practically all items of manufactured clothing except shoes and hats. If importations from Porto Rico are added to these from the United States proper, it will be found that over 55 per cent of the imports into Curacao originate in the United States.

The World's Cotton Consumption

At the present time it seems safe to say that the world is consuming American cotton at the rate of about 14,250,000 bales per annun. The highest consumption on record was that of 1911-12 when the world consumed a total of 14,425,000 of American cotoon.

With short crops, high prices, and impoverished conditions throughout the world following the war, consumption dropped to 10,062,000 in 1920-21, but with a gradual return to normal conditions, reached 13,142,000 bales last year. In the big year of 1911-12, the United States consumed only 4,922,000 bales, while we consumed last year 5,917,000 bales and are now consuming at the rate of over 6,000,000 bales per annun. Japan and China have been steadily increasing their consumption of American, reaching 606,000 bales last year, as compared with only about 400,000 bales annually before the war.

While Europe has not got back to pre-war consumption, the continent took 4,012,000 bales last year which was about 20 per cent less than the pre-war average. Great Britain is the laggard and her textile industry has been the greatest sufferer of all. It is there that the greatest possibility of increasing consumption this year lies. For last year Great Britain consumed only 2,242,000 bales of American, as compared wth around 3,500,000 bales annually before the war—a decline of 35 per cent—a much greater decline than that shown by the Continent of Europe and contrasting with the marked increase in consumption in the United States and Japan and China.—Report from weekly letter of Hunter Manufacturing and Commission Company.

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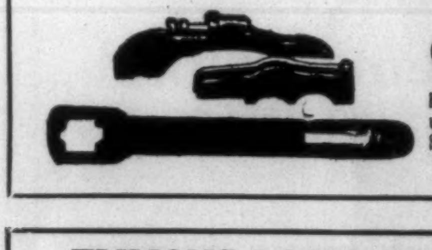

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LAWRENCE. MASS.

Executive Resourcefulness Wanted

(Continued from Page 10)

getting water into the boilers, what else would you do?" The young man responded by stating that he "would inspect the pipe lines." "Yes," said the learned professor. "But, if you didn't get water even then, what would you do. Answer quickly before you have an explosion!" Without a moment's hesitancy, the bewildered student replied, "I'd look overboard to see if there was any water left in the ocean!"

The professor called him resourceful. He knew that this student would have his water works properly adjusted to get water into his boilers and that they could not fail to work if there was any water left in the sea. Even if he had to learn to use the fresh water from his bulkheads instead of salt water direct.

Resourceful is a great asset for the mill man and for the mill. It had aided men to tide over many trying situations. Some men have been so resourceful that they have operated spinning frames without twist gears; they have changed the speed of the spindles without changing the speed of the cylinders; and they have even spun with the same effect of having smaller rings without changing the size of the rings. They have produced the right size of twisted yarns when they did not have the right size of single yarns. They have run two or three different sizes of rovings together to produce the right size of yarns—when they did not have the convenient size of roving. They have increased or decreased the size of their yarns without changing the draught gears. They have even secured more than one hundred per cent of the possible production as figured for a given speed with a certain number of yarn without changing the speeds or the yarn number.

It is this same resourcefulness that has enabled some mill men to keep their yarn numbers within two per cent of the standard; and by which one overseer actually operated his weaving department without seconds, and made one hundred per cent perfect cloth for two consecutive weeks; also that a certain fine goods mill of over five thousand looms rarely have over two per cent of seconds; that another big manufacturer is operating a one thousand loom mill with practically no seconds above one-half or one per cent; and that a certain spinning room rarely has any ends down.

Many more things are being done by the resourceful men of the trade. To excel the mill man must study and cultivate the great art of resourcefulness. It will make him self-reliant. It will fortify him against embarrassing conditions which are bound to arise in any ambitious man's career. The man of pronounced resourcefulness is the coming man of the trade. He will have all that he can do.

Points About Shuttles

(Continued from Page 14)

stands proud that a great unevenness in wear takes place, causing the shuttle to splinter on the bottom; fetching ends down is the result, and also affecting the true delivery of shuttle. The reed is also another factor that one must bear in mind, to see that it is set at the correct angle or bevel; if too much bevel it will wear the shuttle uneven at the top; if too little bevel it will wear the shuttle at the bottom. In either case it will tend to make the bevel side of the shuttle round, and again affect the true delivery; at the same time unevenness in running will obtain, with the result that the life of the shuttle will be shortened considerably. There is also another defect caused by the reed; if one or first instance we will take the shuttle in its rapid journey to and fro; what disturbance to the weft must take place by air pressure alone I will try and explain. I am going to more of the wires is out of line with the remainder a waviness is caused on the bevel side of shuttle. Checkink the shuttle must be noted; in a fast reed loom the swell spring acts in the nature of a check, but in the loose reed where this does not obtain the check strap must be kept in mind. Never allow the shuttle to take the full force of the movement set up by the pick; if you do, trouble will be experienced by your shuttle cracking in the bottom slot or groove both at the eye end and peg end. These cracks are caused by the shuttl being stopped too abruptly; you get two movements here which cause the body part of the shuttle to swell, the sudden impact of the shuttle striking the picker dead at the box end and the shuttle wanting t ocome forward, but owing to the fact that the shuttle is rigid, it simply swells the shuttle wall outward; this continual movement causes, as stated, the shuttle to split.

Forecast Yield Of 15,226,000 Bales

Washington, Oct. 26.—A probable cotton production of about 15,226,000 equivalent 500 pound bales, the Department of Agriculture announced today, is indicated by reports as of October 18 on condition, abandonment, probable yields and ginnings. A probable crop of 14,759,000 bales was indicated two weeks ago. Last year's crop totalled 13,627,936 bales.

The probable yield from October 18 indications is placed at 164.7 pounds of lint cotton per harvested acre, compared with 152 pounds on October 1 this year and 157.4 pounds, the final yield last year.

An abandonment of cotton acreage since June 25 or 4.8 per cent, leaving about 44,231,000 acres for harvest this year, is indicated by preliminary reports. That compares with an estimated abandonment from June 25 to the close of the season of 3.0 per cent in 1924, of 4.1 per cent in 1923 and a ten year average of 3.3 per cent.

The percentage of abandonment of acreage since June 25 and the indicated production, based on all available information on October 18 follows:

Virginia: Abandonment 1.0 per cent; production 48,000 bales. North Carolina, 2.0 and 1,120,000. South Carolina 2.5 and 850,000. Georgia 2.0 and 1,120,000.

Although some cotton has been lost through storms and delayed picking, the department said in a statement, prospects have improved and growers in most States are finding more cotton than they expected two weeks ago.

Prospects show substantial improvement in all the gulf States, the statement added, the largest change being in Texas, where they have improved to the extent of 175,000 bales, attributed partially to betterment in the drouth stricken section. The crop in the west third of the State, however, was said to be unusually late and the final outturn there "is still largely dependent on the date of the first general killing frost."

Present indications also were said to be subject to material change in Oklahoma, Arkansas and Mississippi, according to the character of the remaining season.

"The final outturn of the United States," the department said, "may vary a few hundred thousand bales either way from the present figure."

Of the 46,448,000 acres of cotton standing on June 25, about 2,217,000 acres are estimated to have been abandoned. Although this abandonment amounts to 4.8 per cent of the acreage as originally estimated, the department said, it is somewhat below the abandonment expected before the drought was broken in Texas. In that State abandonment is now estimated at 9 per cent, or 1,641,000 acres. This is about three-fourths of the total cotton abandonment in the United States this season.

Investigate Manufacture Of Rayon in Piedmont

Greensboro, N. C.—A group of business men and textile manufacturers of the Piedmont section of North Carolina and South Carolina are directing an investigation into the manufacture of rayon, with a view to seeing that it is carried on on a big scale in the two States, it was learned here today.

M. Smith Richardson, of this city, millionaire head of the Vick Chemical Company, the man who paid the fourth largest income tax in North Carolina last year, is directing the investigation from this city.

The possibilities are tremendous Rayon, which is an artificial silk, has in the past few years been one of the fabrics that has made fortunes for the textile men who have been wise enough to produce it. It has all but revolutionized hosiery manufacture, knitting processes and other industries in which cotton has been used. While mills producing cotton staples have been shouting hard times and practicing curtailment those mixing rayon with their cotton products have been unable to fill their orders. It is the greatest factor in the diversification of cotton goods manufacture, which has been the doctrine preached loudly for the past few years.

Location of Plants.

It is known that consideration has been given to points in the vicinity of the cities of Asheville, Winston-Sales, Roanoke, Va., Charlotte, High Point, Durham, Richmond, Danville and other places as possibilities in the way of establishing of plans on a huge scale. The manufacturers of the Piedmont section have raised $10,000 for purposes of investigation alone and it is said that there has already been spent more than that amount in the effort to get reliable information.

The manufacturers and capitalists behind the investigation were moved by the fact that consumption of rayon has jumped in the United States from five million pounds in 1914 to 40 million pounds in 1924, the greater part heretofore being used in New England, New Jersey and New York State, principally in the knitted goods and hosiery trades. It is stated that estimated consumption in North Carolina mill is now four and one-half million pounds a year, even with only a fraction of the 11,000,000 spindles in the State using it. With the movement of the cotton manufacturing industry toward the South—84 per cent of the new spindles in the past ten years having been located in the South, and the increasing number of hosiery mills in the South using rayon it is declared that the Piedmont section is the proper location for a rayon plant or plants.

Labor Situation.

What further influence the determination to look into the matter with a view of establishment of rayon plants, is the labor situation. A large part of the cost of making rayon is the labor, estimated from 40 to 70 per cent of the total cost and it is stated that unquestionably labor in the Piedmont section of the South is very much cheaper than in the North.

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Sheetings, Combed Peeler Yarns

Cotton Goods

New York.—Cotton goods markets were quiet during the week. The majority of buyers seemed disposed to await the publication of the next government cotton report before placing additional orders for goods. Prices on gray goods were somewhat easier and it was possible to buy in some quarters for future delivery at concessions from the price of spots. Delivery of goods on past orders continued large and there was little accumulation of stocks. Production continued small due to curtailment in the South for lack of power.

On many constructions of print cloths, prices showed a reduction of a quarter cent a yard, while contracts for delivery after the first of the year were available at a half cent under recent high levels. There was a general expectation of cheaper cotton at present, the trade is well covered ahead for the next 30 days.

Sales of printed goods were fairly large. Business in printed cottons showed less decline than that in brown and bleached goods. The wholesale trade reported a good business for filling-in purposes. Heavy cotton goods have sold well and prices last week held steady. There was a moderate amount of business in fine fancy woven goods.

In the cotton duck market, most of the sales were from second hands in quantities too small to have any effect on the first hand market. Considerable amounts of army duck were offered at close prices. A few buyers bought for delivery into next year because they had not purchased sufficient goods to carry them through November and December without additional supplies. Single and double filling, enameling and wide sail duck figured in the week's business.

The tire fabric market was generally quiet, although early in the week there was a very substantial business in chafter fabrics and square woven fabrics.

Developments in rayon and cotton alpacas indicate that new production is being gotten out to meet keen competition. A larger quantity of 48-square with carded warps has been contracted for, this business during the past week or more having figured in fair volume. Under 48 square has also been brought out, but converters who have seen the sheerness of the cloth were a little uncertain about the salability. The lower constructions come in the gray and in box loom styles with colored yarn grounds.

The Fall River cloth market has shown but little interest during the week, with the total sales estimated at 10,000 pieces, of which volume the majority has been low counts. A few sateens and twills have been noted in the weeks sales but the general inactivity has been noted in these lines also. Considering the decline in cotton, prices have held on a fairly firm basis.

The Government report, due Monday, is the contributing factor in the dullness of the week.

It is generally believed the report will be of a bearish character, in which event buyers will undoubtedly seek an advantage.

The surgical and tobacco houses have been in for moderate quantity of the 36-inch low counts, while the wide and narrow print cloth styles have shown but little interest. Orders have been mostly of the filling in type, and spots goods have been the rule.

Cotton goods prices were quoted as follows:

Print cloths, 28-in., 64x64s	7
Print cloths, 28-in., 64x60s	6¾
Print cloths, 27-in., 64x60s	6½
Gray goods, 38½-in., 64x64s	10
Gray goods, 39-in., 68x72s	10⅝
Gray goods, 39-in., 80x80s	12½
Brown sheetings, 3-yard	13½
Brown sheetings, 4-yard	11½
Brown sheetings, stand	14½
Ticking, 8-ounce	23½
Denims	19
Staple ginghams, 27-in.	11½
Kid finished cambrics	9½a10½
Dress ginghams	13½a17½
Standard prints	9½

Cotton Goods Imports into India.

Cotton piece goods imports into India during August amounted to 140,375,000 yards compared with 122,650,000 in July, Assistant Trade Commissioner Donald Renshaw, Bombay, cables the Department of Commerce. The August total included 60,299,000 yards of grey goods, 44,536,000 of bleached, and 35,530,000 yards of colored. Compared with the July figures, only a slight gain was registered in imports of grey goods, but receipts of bleached goods increased by over 5,000,000 yards and colored goods by almost 12,000,5000. The progress of the monsoon has been generally satisfactory except in some areas of the Bombay Presidency. The Bombay cotton mill strike has spread until at present 70 mills are closed. Only three mills continue to operate, and 145,000 workers are idle.

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The Yarn Market

Philadelphia, Pa.—The yarn markets were slow during the week, part of the dullness being due to anticipation of the government crop report due Monday. The demand for carded yarns was limited almost entirely to spot supplies and where sales were made the full market price was paid. Many dealers expect a sharp readjustment of prices after the crop report, but spinners are inclined to hold prices were firm even though a large cotton yield is forecast. Deliveries of yarn from the South was being seriously delayed because of the curtailment brought about by lack of power. Yarns for prompt delivery are hard to secure except in few small lots and there is no evidence of any stocks either in the markets or at the mills. The drought situation has not improved and curtailment may continue for some time yet.

Sales of combed yarns during the week showed that spot yarns are bringing a very substantial premium and are still in very small supply. Combed yarn mills are generally well sold ahead for the next few weeks and are not able to keep up with deliveries under the curtailment program. Prices on combed yarns were very firm and spinners state they will not go lower even should the cotton market show a decline. It is pointed out that yarn prices are generally below replacement values and that lower cotton prices would not warrant a drop in yarn quotations.

Yarn prices in this market were quoted as follows, although spinners quotations were generally higher:

Southern Two-Ply Chain Warps..

8s	37 a__
10s	38 a__
12s	39 a__
16s	41 a__
20s	42½a43
24s	45 a46
26s	46 a47
30s	47½a49
40s	58 a59
50s	68 a69

Southern Two-Ply Skeins

8s	37 a__
10s	38 a__
12s	39 a__
14s	40 a__
16s	41 a__
20s	42 a__
24s	45 a__
26s	46 a__
30s	47 a48
36s	55 a__
40s	56 a58
40s ex.	59 a60
50s	67 a69
60s	74 a__
Tinged Carpet 3 and 4-ply	36 a__
White Carpet 3 and 4-ply	37 a__

Part Waste Insulated Yarn.

6s, 1-ply	33½a__
8s, 2, 3 and 4-ply	34½a35
10s, 1-ply and 3-ply	36 a__
12s, 2-ply	37 a__
16s, 2-ply	38½a39
20s, 2-ply	41 a__
26s, 2-ply	45 a__
30s, 2-ply	46 a46½

Duck Yarns—3, 4 and 5-ply.

8s	37 a__
10s	38 a__
20s	42 a43

Southern Single Chain Warps.

10s	38 a__
12s	39 a__
14s	40 a__
16s	41 a__
20s	42 a__
24s	44 a__
26s	45 a__
30s	46 a47
40s	57 a__

Soutnern Single Skeins.

6s	37 a__
8s	37 a__
10s	38 a__
12s	39 a__
14s	39½a__
16s	40½a__
20s	41 a__
22s	42 a43
24s	44 a__
26s	44 a45
30s	46 a47

Southern Frame Cones.

8s	36½a__
10s	37 a__
12s	37½a__
14s	38 a__
16s	38½a__
18s	39½a__
20s	40½a__
22s	41 a__
24s	42½a43
26s	43½a44
28s	44½a45
30s Tying in	43½a44
30s	47 a48
40s	55 a56

Southern Combed Peeler Skeins, Etc.—Two-Ply

16s	56 a60
20s	58 a62
30s	65 a67
36s	75 a80
40s	80 a85
50s	87½a90
60s	90 a95
70s	1 05a1 10
80s	1 18a1 20

Southern Combed Peeler Cones.

10s	48 a49
12s	49 a50
14s	49½a50½
16s	52½a__
18s	51 a52
20s	52 a__
22s	53 a__
24s	56 a__
26s	56½a__
28s	57 a__
30s	60 a__
32s	62 a__
34s	65 a__
36s	72 a__
38s	74 a__
40s	75 a__
50s	80 a__
60s	90 a95
70s	1 05a__
80s	1 15a__

Eastern Carded Peeler Thread—Twist Skeins—Two-Ply.

20s	50 a__
22s	51 a__
24s	56 a__
30s	59 a__
36s	63 a__
40s	65 a__
45s	70 a__
50s	75 a__

Eastern Carded Cones.

10s	41 a__
12s	42 a__
14s	43 a__
20s	47 a__
22s	44 a__
26s	51 a__
28s	53 a__
30s	55 a__

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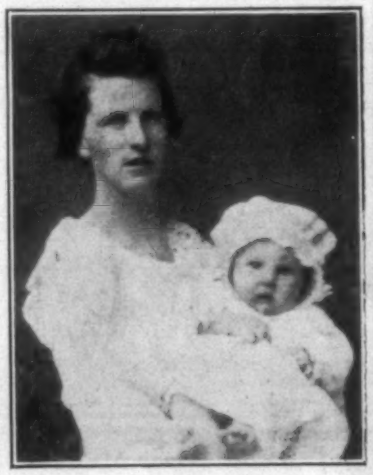

Elizabeth Vestle Hill

Cash reward will be paid for information as to present address of Elizabeth Vestle Hill, of Lexington, S. C., who on Sept. 7th deserted her husband and two babies. Mrs. Hill has two gold front upper teeth, wears large gold frame glasses and is tall and slender. Works in cotton mill card or cloth room. Last seen in Rockingham, N. C., in company of Austin McManus, formerly a preacher, who has worked in barber shops and in mills as weaver. McManus is about 6 feet tall and has scar on left jaw. Address R. C. H., care Southern Textile Bulletin.

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Reviews Textile Conditions

WILLIAM B. McCOLL, president of the National Association of Cotton Manufacturers, said in part at banquet Thursday night:

The cotton industry is emerging from one of the most difficult periods of its existence. So serious has the depression been that manufacturers with life-long experience have stated that they could not remember any other times in their career that called for a closer study of manufacturing and market conditions. Drastic methods have been tried to keep plants running and organizations intact. This period has undoubtedly called forth the best that is in us, and we have profited by the experience. We have accepted the challenge with courage and determination that will augur well for our industry in the years to come.

In the last few years Southern competition has been more keenly felt, and has extended to finer goods. We in the North sincerely congratulate our Southern friends on the wonderful development of their textile plants. Handicapped in earlier years from untrained labor and management, they have shown what can be accomplished by their determination and application to the problems that confronted them. Their mill villages, their churches and schools, and up-to-date plants are all that can be desired.

Southern towns are making attractive offers and concessions to attract capital to erect plants within their boundaries. They realize the great benefits to their peoples by extending industrial enterprises. Northern manufacturers recognize that textile problems will no longer be sectional, but in a large measure, national. We desire the closest spirit of harmony and co-operation with the South in the solution of matters pertaining to our common interests. Keen competition in the sale of merchandise will undoubtedly exist, but this competition should not be carried to the extent of creating unprofitable business for all. As time goes on, North and South will undoubtedly adjust themselves to the manufacture of that product for which they are best suited economically and geographically.

I view with confidence the steady and continuing improvement in the textile industry. This is evident from the increasing number of mills now running to capacity.

Greater attention to intelligent mechandising and market conditions is more essential today than ever before. The ability to know what yor mill is best suited to make, and to turn out that product economically and quickly will largely govern success in the future.

From the best information obtainable, it is evident that stocks of goods are low in the hands of mills, as well as distributors. This condition must eventually influence demand. Volume business cannot be done always on a hand-to-mouth basis, as that will be found unprofitable to the distributors as well as to the mills. Speculative buying, such as we have often seen in the past, is not advocated, but merely a sound and sensible merchandise research reserve to give the customer what he wants when he wants when he wants it.

A progressive step has been occomplished during the past year by the Agricultural Department and the spinners of the world establishing universal standards of grades of cotton. Atention is now being given to the possibility of establishing universal standards of staple. This is a more difficult problem, and may have to be preceded by the perfecting of automatic machines to pull and measure staple.

The balance of opinion now seems to be opposed to Government semimonthly estimates of the cotton crop, although at the International Cotton Conference held at Vienna this summer, opposition to these estimates was withdrawn after listening to a full explanation of the method of arriving at them from representatives of the Agricultural Department.

It should be the aim of all branches of the trade to reduce the speculative element as much as possible. The cotton crop is peculiarly sensitive to weather conditions, to destructive pests, and to influence of speculative trading on the Cotton Exchanges. If the Government semimonthly crop estimates increase uncertainty and seculation, they should certainly be abolished. I strongly favor co-operative marketing as a steadying and wholesome method of distribution, and another useful influence in curbing speculation.

The European nations which consume cotton are still pressing diligently forward in the development cotton growing in other countries. Our rubber manufacturers feel the the need of growing rubber themselves, in order to minimize dependence on foreign control of prices. It is natural that cotton manufacturers abroad should feel the same need in relation to American supply an control of cotton. We should lend our sympathetic co-operation to foreign nations in their endeavor to grow cotton, as a further steadying influence on market fluctuations.

The tendency in most industries is to standardize production, but in many branches of cotton manufacturing there is a movement in the opposite direction, namely diversification,—the result largely of fickleness of fashion. There would in my opinion be many advantages for cotton mills that produce staple goods to combine in larger units, which might result in many economies and greater ability to extend the export business. On the other hand, smaller units may be better adapted for diversified production to meet continual changes in styles and fabrics.

German Cotton Cloth Trade.

Although cotton picee goods continues to be the most important item of cotton textiles imported into Germany, receipts of foreign cotton cloth fell off almost one-third in the the first half of 1925 as compared with the like period of 1924. Assistant Commercial Attache Douglas Miller, Berlin, advises the Department of Commerce.

EMPLOYMENT BUREAU

The fee for joining our employment bureau for three months is $2.00, which will also cover the cost of carrying a small advertisement for two weeks.

If the applicant is a subscriber to the Southern Textile Bulletin and his subscription is paid up to the date of his joining the employment bureau the above fee is only $1.00.

During the three months' membership we send the applicant notices of all vacancies in the position which he desires and carry small advertisement for two weeks.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern Textile Industry.

WANT position as carder, spinner, also experienced in spooling, winding twisting and warping. I. C. S. graduate. Age 35, can, come on short notice. No. 4682.

WANT position as carder or spinner. Have been overseer in both departments and also experienced as assistant superintendent . Best of references. No. 4683.

WANT position as superintendent of small mill or assistant in larger mill Now employed as carder in large plant. Good references. No. 4684.

WANT position as manager or secretary of 5,000 to 10,000 spindle mill Prefer Alabama, or state west of Alabama. Am well qualified and can give excellent references. No. 4687

WANT postion as second hand in carding in large room Have had 20 years experience Married, age 32 sober, musician. Prefer South Carolina. Good worker, know colored and plain work. No. 4688.

WANT position as overseer spinning or carding and spinning. Experienced man who can deliver the goods. Good references as to character and ability. No. 4689

WANT position as overseer weaving, the Carolinas or Georgia. Now employed, but wish to change Experienced on plain and fancy goods. Excellent references. No. 4690.

WANT position as overseer cloth room. Sixteen years experience Now employed as overseer. Have family. Good references. No... 4691.

WANT position as overseer spinning. 20 years experience on all numbers and colors. Can come on short notice. First class references. No. 4692.

WANT position as superintendent of weave mill Long experience in good mills. Understand economical production of quality goods. Prefer mill in the Carolinas, Georgia or Alabama. Special experience on ducks and chambrays. No. 4693.

WANT position as overseer weaving on plain cam weave Have been overseer for four years Married good character, good references. No. 4694.

WANT place as overhauler in card room. Can give excellent references from mills in which I have done this work and can give satisfaction in every respect. No. 4695

WANT position as overseer carding or assistant superintendent. Prefer mill on white goods Age 26, single, 9 years experience Now overseer and night superintendent. No. 4696.

WANT position as master mechanic. Now employed, good reasons for wishing to change Large job preferred. Good references. No. 4697.

WANT position as overseer spinning, or spooling, winding and twisting. Now employed but wish larger place. Long experience and good references. No. 4698.

WANT position as superintendent of medium size mill or overseer carding or spinning in larger plant. Now employed as assistant superintendent. Good references. No. 4699.

WANT position as superintendent of yarn mill. Long practical experience as superintendent and overseer and have excellent record. No. 4700.

WANT position as overseer carding or would take overseer's place in large place in large mill. Experienced man of character and ability who can give satisfaction. No. 4701.

WANT position as superintendent. Experienced on both colored and white goods, also fancies. Fine references. No. 4702.

WANT position as carder, spinner, or twister room man. Good habits, long experience and references to show character and ability. No. 4703.

WANT position as master mechanic. Number of years experience in mill steam plant and machine shop. Have first grade Fulton County (Ga.) engineer's license. No. 4704.

WANT position as carder or spinner. Have long experience in number of first class mills and can give excellent references. No. 4705.

WANT position as dyer, bleacher or in charge of mercerization. Have had 15 years experience in warp and skein work in some of the finest mills in the country. Will accept place either as superintendent or overseer. No. 4706.

WANT position as superintendent of yarn mill or carder and spinner. Experienced man with long record of successful service. Good references. No. 4707.

WANT position as overseer weaving. Now employed as overseer. Have been with present mill 19 years, 5 years as overseer. Have had 23 years experience in weaving. Want larger and better paying job. No. 4708.

WANT position as overseer weaving, slashing or beaming. Now employed but wish larger place. Will be glad to submit references to mill needing high class man. No. 4709.

WANT positon as overseer weaving or would take second hand in large mill Eighteen years experience as overseer. Now employed but have good reasons for wishing to change. Good references. No. 47010.

WANT position as overseer spinning. Age 34, married, 15 years experience. Can get real results. References. No. 4711.

WANT position as overseer spinning. Now employed, been on present job several years. Would consider permanent job as spindle plumber in large mill. Age 33, married, excellent references. No. 4712.

WANT position as superintendent of yarn mill or overseer carding or spinning. Long experience in good mills, good habits. First class references. No. 4713.

WANT position as superintendent of medium size mill at good pay. Have had 20 years in the mill, unusually good experience in weaving. Now general overseer in large paint. Good references. No. 4714.

WANT position as overseer weaving. Experienced on wide range of goods and can get results. Now employed but can come on short notice. No. 4715.

WANT position as overseer carding or spinning. Nine years as overseer in these departments. Age 37. Best of references. No. 4716.

WANT position as overseer weaving. Want good job in first class mill. Competent man who can get production at low cost. Good manager of help. A-1 references. No. 4717.

WANT position as master mechanic. Experienced on both steam and electric work, good machinist and can handle mill machine shop in first class manner. Excellent references. No. 4718.

CLASSIFIED LIST OF ADVERTISERS

Air Conditioners—
- American Moistening Co.
- The Bahnson Co.
- Carrier Engineering Co.
- Parks-Cramer Co.

Albone—
- Roessler & Hasslacher.

Artesian Wells—
- Virginia Machinery & Well Co., Inc.

Architects and Mill Engineers—
- Lockwood, Greene & Co.
- Sirrine & Co., J. E.

Ash Handling Equipment—
- Link-Belt Co.

Automatic Feeds for Cotton—
- Saco-Lowell Shops.
- Whitin Machine Works.

Automatic Lint Cleaners—
- T. C. Entwistle Co.

Automatic Stop Motion—
- Eclipse Textile Devices, Inc.

Automatic Yarn Cleaner—
- Eclipse Textile Devices, Inc.

Ball Bearing—
- Charles Bond Company
- Fafnir Bearing Co.

Balers—
- Economy Baler Co.

Baling Presses—
- Economy Baler Co.

Bands and Tape—
- American Textile Banding Co.

Baskets—
- Charles Bond Company
- W. T. Lane & Bros.

Beaming and Warping Machinery—
- Barber-Colman Co.
- Cocker Machinery & Foundry Co.
- Draper Corporation.
- Easton & Burnham Machine Co.
- T. C. Entwistle Co.
- Saco-Lowell Shops.

Beam Heads—
- T. C. Entwistle Co.
- Mossberg Pressed Steel Corp.
- Saco-Lowell Shops.

Beams (Section)—
- Washburn.

Beams (All Steel)—
- T. C. Entwistle Co.
- Mossberg Pressed Steel Corp.
- Saco-Lowell Shops.

Beaming Combs—
- T. C. Entwistle Co.
- Easton & Burnham Machine Co.
- Steel Heddle Mfg. Co.

Bearings (Roller)—
- Charles Bond Company
- Hyatt Roller Bearing Co.

Bearings (Shaft)—
- Charles Bond Company
- Fafnir Bearing Co.
- Hyatt Roller Bearing Co.
- William Sellers & Co., Inc.
- Woods, T. B. & Sons Co.

Bearings (Textile Machinery)—
- Charles Bond Company
- Fafnir Bearing Co.
- Hyatt Roller Bearing Co.

Belt Coneyors—
- Link Belt Co.

Belt Tighteners—
- Charles Bond Company
- Link-Belt Co.
- Woods, T. B. & Sons Co.

Belting—
- The Akron Belting Co.
- Jas. H. Billington Co.
- Charles Bond Company
- Charlotte Leather Belting Co.
- Chicago Belting Co.
- Druid Oak Belting Co.
- Slip-Not Belting Corp.
- Graton & Knight Mfg. Co.
- E. F. Houghton & Co.
- Edward R. Ladew Co.

Belt Cement—
- Charles Bond Company
- Chicago Belting Co.
- Edward R. Ladew Co.
- Graton & Knight Mfg. Co.
- E. F. Houghton & Co.

Belt Dressing—
- Charles Bond Company
- **Cling-Surface Co.**

Belt Lacing—
- Charles Bond Company
- Chicago Belting Co.
- Edward R. Ladew Co.
- E. F. Houghton & Co.
- Graton & Knight Mfg. Co.

Belting (Link)—
- Charles Bond Company
- Link-Belt Co.

Bicarbonate of Soda—
- Mathieson Alkali Works, Inc.

Bleacheries—
- Joseph Bancroft & Sons Co.
- Sayles Finishing Plants, Inc.

Bleachers—
- Southern Artsilk Bleach & Dye Works, Inc.

Bleaching Materials—
- Arabol Mfg. Co.
- Arnold, Hoffman & Co., Inc.
- L. Sonneborn Sons, Inc.
- Bosson & Lane.
- J. B. Ford Co.
- National Aniline & Chemical Co.
- Roessler & Hasslacher Chem. Co.
- United Chemical Products Co.
- Wolf, Jacques & Co.

Bobbin Holders—
- Fournier & Lemoine.

Bobbins and Spools—
- Jas. H. Billington Co.
- David Brown Co.
- Courtney, The Dana S. Co.
- Draper Corporation.
- Jordan Mfg. Co.
- Lestershire Spool & Mfg. Co.
- Lowell Shuttle Co.
- Mossberg Pressed Steel Corp
- Walter L. Parker Co.
- Steel Heddle Mfg. Co.

Bobbin Saving Treatment—
- The Textilac Co.

Boxes—
- Wilts Veneer Co.

Box Shooks—
- Wilts Veneer Co.

Blowers and Blower Systems
- Carries Engineering Co.
- Parks-Cramer Co.

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- Borne, Scrysmer Co.

Brushes—
- Atlanta Brush Co.
- Curtis & Marble Machine Co.

Brushing Machines—
- Curtis & Marble Machine Co.

Bobbin Stripper—
- Terrell Machine Co.

Calenders—
- H. W. Butterworth & Sons Co.
- B. F. Perkins & Son, Inc.
- **Textile Finishing Machinery Co.**

Calender Roll Grinders—
- B. S. Roy & Son Co.

Cards—
- Woonsocket Machine & Press Co., Inc.
- Saco-Lowell Shops.
- Whitin Machine Works.

Card Clothing—
- Ashworth Bros.
- Charlotte Mfg. Co.
- Howard Bros. Mfg. Co.

Card Grinding Machinery—
- Easton & Burnham Machine Co.
- Dronsfield Bros.
- T. C. Entwistle Co.
- Roy & Son Co., B. S.
- Saco-Lowell Shops.
- Whitin Machine Works.
- Woonsocket Machine & Press Co., Inc.

Carrier Aprons—
- Link-Belt Co.

Caustic Potash—
- A. Klipstein & Co.

Caustic Soda—
- Arnold, Hoffman & Co. Inc.
- A. Klipstein & Co.
- Mathieson Alkali Works, Inc.

Chain Belts and Drives—
- Charles Bond Company
- Link-Belt Co.
- Morse Chain Co.

Chemicals—
- L. Sonneborn Sons, Inc.
- J. B. Ford Co.
- Hart Products Corp.
- A. Klipstein & Co.
- Mathieson Alkali Works, Inc.
- National Oil Products Co.
- Seydel Chemical Co.
- Seydel-Woolley Co.

Cloth Presses—
- Economy Baler Co.

Cloth-Winding Paper Cores—

Cores for Cloth-Winding—

Clutches (Friction)—
- Charles Bond Company
- **Textile Finishing Machinery Co.**
- Wood's T. B. Sons Co.

Cloth Winders and Doublers—
- Curtis & Marble Machine Co.

Clutch Spindles—
- Fournier & Lemoine.

Coal Handling Machinery—
- Link-Belt Co.

Combs—
- Steel Heddle Mfg. Co.

Combs (Beamers, Warpers, Slashers)—
- T. C. Entwistle Co.
- Easton & Burnham Machine Co.

Commission Merchants—
- Catlin & Co.
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- Mauney-Steel Co.
- Paulson, Linkroum & Co.
- Ridley, Watts & Co.
- The Farish Co.

Compressors (Air)—
- Allis-Chalmers. Mfg. Co.

Condensers—
- Allis-Chalmers Mfg. Co.

Conditioning Machines—
- American Moistening Co.

Conduit Fittings—
- Chicago Fuse Mfg. Co.

Cones (Paper)—
- Sonoco Products Co.

Cone Vice Couplings—
- William Sellers & Co., Inc.

Conveying Systems—
- Link-Belt Co.

Coolers (Air)—
- T. B. Wood's Sons Co.
- ——See Humidifying Apparatus.
- Sonoco Products Co.
- Sonoco Products Co.

Cotton—
- Jackson, Hill & Co.
- Lesser-Goldman Cotton Co.
- Lineberger Bros.
- Sanders, Orr & Co.
- Stewart Bros. Cotton Co.
- S. B. Tanner, Jr.
- Wm. & York Wilson.

Cotton Machinery—
- Ashworth Bros.
- Barber-Colman Co.
- Collins Bros. Machine Co.
- Crompton & Knowles Loom Works.
- Dixon Lubricating Saddle Co.
- Draper Corporation.
- Fales & Jenks Machine Co.
- H. & B. American Machine, Inc.
- T. C. Entwistle Co.
- Hopedale Mfg. Co.
- Metallic Drawing Roll Co.
- National Ring Traveler Co.
- Roy & Son, B. S.
- Easton & Burnham Machine Co.
- Saco-Lowell Shops.
- Stafford Co., The
- Universal Winding Co.
- Whitin Machine Works.
- Whitinsville Spinning Ring Co.
- Tolhurst Machine Works.
- Terrell Machine Co.
- Southern Spindle & Flyer Co.
- Woonsocket Machine & Press Co., Inc.

Cotton Openers and Lappers—
- Saco-Lowell Shops.
- Whitin Machine Works.
- Woonsocket Machine & Press Co., Inc.

Cotton Softeners—
- Arabol Mfg. Co.
- Arnold, Hoffman & Co., Inc.
- Bosson & Lane.
- Hart Products Corp.
- E. F. Houghton & Co.
- A. Klipstein & Co.
- National Oil Products Co.
- Seydel Chemical Co.
- Seydel-Woolley Co.
- L. Sonneborn Sons, Inc.
- Wolf, Jacques & Co.

Cotton Waste Machinery—
- Woonsocket Machine & Press Co., Inc.
- Saco-Lowell Shops.
- Whitin Machine Works.

Counters (Revolution, Hank, Pick, etc)—
- The Root Co.

Couplings (Shaft)—
- Charles Bond Company
- William Sellers & Co., Inc.
- Wood's T. B. Sons Co.

Cranes—
- Link-Belt Co.

Dobby Chain—
- Crompton & Knowles Loom Works.
- Rice Dobby Chain Co.

Doffing Boxes—
- Rogers Fibre Co.

Doublers—
- Saco-Lowell Shops.
- **Textile Finishing Machinery Co.**
- Universal Winding Co.

Drawing Rolls—
- Metallic Drawing Roll Co.

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- Puro Sanitary Drinking Fountain Co.

Drives (Silent Chain)—
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- Morse Chain Co.

Drop Wires—
- Crompton & Knowles Loom Works.
- Draper Corporation.
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Dryers (Centrifugal)—
- American Laundry Machinery Co.
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- Tolhurst Machine Works.

Dyers—
- Southern Artsilk Bleach & Dye Works, Inc.

Dyeing, Drying, Bleaching and Finishing Machinery—
- Cocker Machinery & Foundry Co.
- American Laundry Machinery Co.
- H. W. Butterworth & Sons Co.
- Franklin Process Co.
- Klauder-Weldon Dye Machinery Co.
- Perkins, B. F. & Sons, Inc.
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Dyestuffs and Chemicals—
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- E. I. du Pont de Nemours & Co., Inc.
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- A. Klipstein & Co.
- Roessler & Hasslacher Chemical Co.
- National Aniline & Chemical Co.
- United Chemical Products Co.
- Wolf, Jacques & Co.

Dye Works—
- Franklin Process Co.
- Sayles Finishing Plants, Inc.

Eclipse Van Ness Dyeing Machine—
- Eclipse Textile Devices, Inc.

Electric Fans—
- Allis-Chalmers Mfg Co.
- General Electric Co.
- Westinghouse Electric & Mfg. Co.

Electric Hoists—
- Allis-Chalmers Mfg. Co.
- Link-Belt Co.

Electric Lighting—
- Allis-Chalmers Mfg. Co.
- General Electric Co.
- Westinghouse Electric & Mfg. Co

Electric Motors—
- Allis-Chalmers Mfg. Co.
- Charles Bond Company
- Fairbanks-Morse Co.
- General Electric Co.
- Westinghouse Electric & Mfg. Co.

Electric Supplies—
- Chicago Fuse Mfg. Co
- Cooper-Hewitt Electric Co
- General Electric Co
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Elevators—
- Link-Belt Co.

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- **Textile Finishing Machinery Co.**

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——See Architects.
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——See Electric Lighting.
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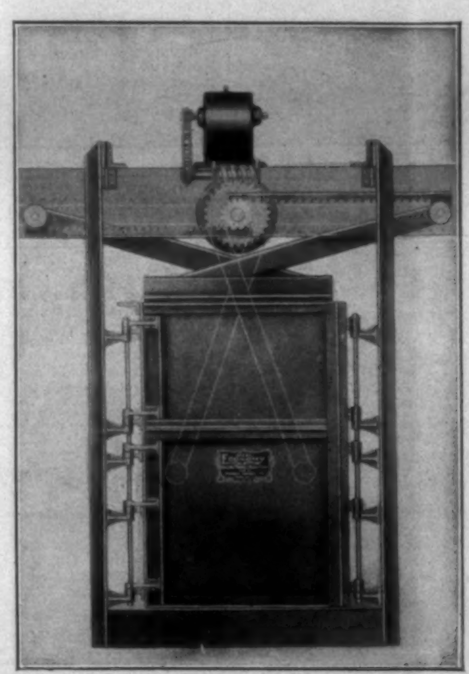

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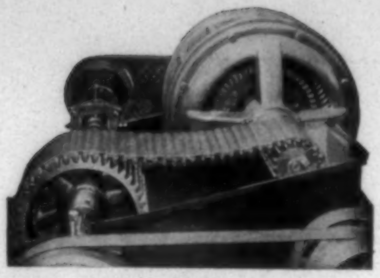

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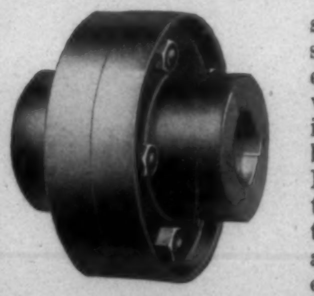

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